# CREATE: The Publisher Easy to use Pro package 

Hi,
Did you have an absolutely amazing Christmas and did Santa bring you everything you hoped for? I certainly hope so
Well folks, it's not easy writing the Indi Column 2 weeks before Christmas to meet deadlines for the January Magazines but here goes.
At the time of writing there seems little doubt that the Amiga Desktop Dynamite pack has been a major success story with Sales exceeding every predic ton, well done to David Pleasance and his team at Commodore.
Without a doubt the big news has been Commodores decision to add two extra titles to the CD32 Bundle making 4 in total (5 if you buy from Indi) This week Indi have formally announced the SXI Expansion module for the CD32 allowing the addition of a keyboard and other peripherals. The impi cations of this are very important for both existing Amiga owners and potential CD 32 buyers.
It is now a real alternative to buy a CD 32 , add an expansion module and keyboard and effectively own an Amiga 1200 with a CD drive rather than the alternative of buying an Amiga 1200 and then adding the CD 32. Developements are moving very quickly in this area. I will keep you up to date with more information next month.
Best wishes

# Jabske farmer 

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We then considered that if you were going to buy a Panasonic printer you would probably need a quality word processing package to use with it. We found that too, with 'Wordworth' yet every Panasonic printer. Of course your might be a little too expensive on top of your printer purchase! So together with Panasonic we decided to give a copy of Wordwort solution with the alternative of two great games. How's that for added value?

## Panasonic KX - P2I 23



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## Nine pages

 for enquiring mindsThe most authoritative monthly columns in the business, covering all areas of specialised Amiga activity

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## Comms

CompuSenve bas been nicknamed CompuSpend by some of its users. Is it really that pricey? Pbil Soutb links up and finds out

## Amos

How to make your screens fade and appear again, and a peek at the latest issue of Amos disk magazine Totally Amas, watb Pbil Soutb

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## COVER STORY




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- you how to type special characters. System
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## Replicator

- Quickly makes multiple copies of floppy disks.
- Creates disk images and saves as AmigaDOS files.


## Locator

- Searches disks for files that partially or fully match specified names.
- Displays location of files, information about files, and file contents.


## Encryptor

- Encrypts and decrypts files to prevent unauthorized access.
- File decryption is password protected.


## File Eraser

- Completely erases and deletes files to make their contents unrecoverable.
- Uses standard or US Government erasure methods.


## Disk Eraser

- Completely erases all traces of just deleted files, or of all files on a disk.
- Uses standard or US Government crasure methods.


## Keystroke Finder

- Displays keystrokes necessary to generate any character.


## System Mover

- Quickly and easily moves fonts, printer drivers, and system files berween disks.
- Displays version information for printer drivers and system files.


## Brain Cloud

- Makes a floppy disk unaccessible to AmigaDOS.
- Not even the Amiga's "Format" command will work on a disk with a "Brain Cloud"!


## General

- Workbench 2.0 style "3-D" user interface.
- Requires Kickstart 1.2 or later (Kickstart 2.0 or later recommended).


## N E W S S

## Games

sales a boost

AN IMPROVED CD32 pack containing extra games and full-motion video clips hit the High Street during the last few Christmas shopping days.

The move was made by Commodore in an attempt to pick up extra Christmas sales, after a games shortage and poor market conditions led to a disappointing start to the machine's life.

The manufacturer are confident they will have


FMV:
Running
video CD
within
weeks
achieved 75,000 sales in Britain by the end of last year around a third of the original projection made at launch.
But the company are pleased with the console's performance so far, and claim it is substantially outselling its Sega Mega CD competitor.

The Dangerous Streets bundle comes with new titles Dangerous Streets and Wing Commander in addition to Diggers and Oscar which have been supplied with the console since launch.

Micro-Value Flair's Dangerous Streets is a beat-'em-up featuring eight exotic combatants from across the globe and Wing Commander is an improved version of Electronic Arts' flight sim.

Commodore say that if bought individually the four games would cost $£ 120$, but despite this they have been able to maintain the machine's original $£ 299$ price tag.
Video clips included in the pack are aimed as a "stunning" demonstration of the console's full motion video capability when fitted with the video CD module.

As we went to print the device was promised for imminent availability at $£ 199$, and first compact disc films including Top Gun and Star Trek are expected within the


Dangerous Streets: More CD games, same price

## next couple of months.

The pack also contains demos of the Amiga CD32's existing motion video system CDXL and previews of games on the way for the machine.

## Report clears vicleo games

PLAYING video games very rarely triggers epileptic seizures in people without a known history of epilepsy.

That's the finding of a Government-funded report just published following a national study led by Dr David Fish of the National Society for Epilepsy.

It reveals that people who suffer seizures for the first time while playing video games are photo-sensitive - in other words they are susceptible to flashing light.

The report says of the 30,000 Britons who suffer their first seizure each year, 600 are definitely at risk from epilepsy attacks triggered by TV, video games and other light sources.

Up to 150 people each year may have their first seizure brought on by playing a video game, although there is no evidence that photo-sensitivity can actually be caused by the games.
Most newly diagnosed photo-sensitive epileptics are between seven and 19 years old, it adds.

Consumer Affairs Minister Lord Strathclyde said: "This report shows that photosensitive epilepsy affects a very small number of people.
"A much smaller number suffer their first seizure while playing video games - roughly the same as through watching television.
"People who suffer must always seek medical advice and those with known epilepsy should ask their doctor whether they
are at risk from seizures triggered by video games."
Some computer games makers have recently been putting warnings on the outside of their packaging advising players how to avoid health problems.

The industry watchdog ELSPA's general secretary Roger Bennett said: "There are certain issues that are important regardless of whether the player suffers from epilepsy."
"Don't sit too close to the monitor, don't play for too long and don't play in the dark."


Games: Government give epillepsy all clear

> Vicleo graphics prices slashed

THIRTY-TWO bit video graphics board Harlequin and paint package TV Paint 2 have had massive price cuts by specialist Amiga Centre Scotland (089 687 583).

The move puts the products into a category that makes them affordable to semiprofessionals and keen video amateurs.

Harlequin sees cuts of around $£ 230$ across the range, while the TV Paint 2 has had its price tag slashed by $£ 450$ to $£ 249$. When bought together even bigger savings are available.
ACS boss Martin Lowe said the prices had been cut for several reasons: "On the one hand we've got a much better [trade] price on TV Paint," he said.
"On the other hand we've managed to cut Harlequin's price because we've now recovered our development costs."

## ©S Pontrollep Leeders of tis Packi...

## Looks to 

The new QJ SG ProPad 2 is designed to match the best of the new generation of video games for the SEGA Megadrive. It has a programmable feature which allows any combination of fire button moves to beassigned to a single left or right fire button.
The recorded combinations are all indicated in the LED panel.

## PROGRAM PAD

- 30 pre-programmed special moves, including a secret code! - 6 memory spaces to program your own combinations - Mirror function doubles number of pre-programmed moves - LCD control panel to display action sequences - Independent autofire control
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## News Briefs

## CD problem

THE external CD drive under development to enable A1200s to use compact disc software designed for the CD32 could be scrapped, Amiga Computing has learned.

Commodore are having difficulty giving the drive full motion video capability which they consider essential before it can be released.

## Monitor shortage

AMIGA buyers were hit by a monitor shortage on the run up to Christmas, with most computer stores selling out early in the peak selling period.

The problem was caused by Philips withdrawing their top-selling CM8833-II during autumn and Commodore temporarily halting production of the 1084 S colour screen.

Commodore boss David Pleasance expected monitors to be available within the next few weeks and said it was necessary for the firm to put all resources into the A1200 and CD32.

## Unfaithful sex games

AN ISRAELI man wants to divorce his "unfaithful" wife because of her use of filthy computer games, according to online magazine STReport.

The unnamed man is claimed to have told a Tel Aviv rabbinical court that his wife cheats on him in her thoughts by playing the games, making her a theoretical adulteress.

He said there is no difference between a woman who has a physical relationship with other men and one who imagines it.

## Linking up

AN ADAPTOR to enable Great Valley Products' EGS-28/24 Spectrum graphics board to be used with NEC's FG series of monitors is now available.

The device does not affect the graphic quality provided by the EGS Spectrum, and is available from Silica Systems (081-309 1111). Price remains to be fixed, but is expected to be under £25.

## Drive locks out viruses

AN EXTERNAL floppy disk drive featuring anti-virus protection has just been added to Amitek's Friendly Technology range of Amiga peripherals.

The 1 Mb drive has an enable/disable switch, a daisy chain connector and a Sony mechanism using anti-click technology. It is housed in a metal casing and comes with a twoyear warranty.
"Rather than just offer a dull Amiga drive, we wanted to offer Amiga users something better but still keep the price very competitive," said Amitek spokesman Andy Leaning.
"We could have made just another Amiga drive, but we went to the time and trouble to find what specifications users wanted."

Silica Systems are selling the drive for $£ 59$, and can be telephoned on 081-309 1111


Amitek: Found which specifications drive buyers wanted

## Consoles grow into computers

CD32 owners will soon be able to build their console into an A1200-compatible computer using a new expansion device from US peripheral manufacturer Microbotics.

The $£ 149.99$ SX1 slots into the machine to allow a keyboard, floppy disk drive, printer and up to 6 Mb of fast access memory to be added.

British dealer Calculus Stores (0543 251275 ) are also selling it in a bundle
with CD32 and four games, a keyboard, Panasonic 2123 colour printer and Zappo floppy disk drive for £499.99.

And for existing CD32 owners buing the module Calculus will sell the peripherals separately - the ke board costing $£ 49.99$ and floppy drive $£ 54.99$.

Each of the products is also available from the firm's mail order sister company, Indi Direct Mail (0543 419999), with discounting.

## Museum takes CD32 <br> in $£ 4 \mathrm{~m}$ facelift

A STATE-ot-the-art information system based on £299 CD32 games consoles has just been installed at the London Transport Museum as part of a $£ 4$ million facelift.
More than 100 of the machines are used to provide interactive information, video, animations and sound effects.
They are linked using an expansion system developed by Index Information, the Hampshire-based firm which chose Commodore's machine for the displays.

A master machine controls the volume of sound effects around the museum and identifies and reports on problems found over the network.

Visitors use touch screens to discover facts on London's transport system, its vehicles and the effects it has had on the city and Londoners since 1800.

Each display is hooked up to a CD32 player which has been rack mounted and hidden from general view.
"Many of the qualities that will make the CD32 such a successful home entertainment system also make it the ideal commercial multimedia player," said the Index's Mike Tinker.
"A high quality and low cost delivery unit combined with a powerful development platform is allowing us to provide advanced displays at much lower costs than competitive systems."

Material is stored on 60 compact discs and took almost two years to develop using A4000s.

## Faster compression for Quarterback

HARD disk backup and archiving utility Quarterback has been upgraded again, this time with faster compression and the ability to automate backups at set times.

Schedule Pro, included with v6 of US-based Central Coast Software's program, enables users to schedule and automatically run any Amiga program.

It can display reminders on the screen at preset times and, as with the program execution feature, can be set for single or repeated occurrences.

Quarterback also operates much faster than before, with its makers claiming it can compress data read from a hard disk as fast as it can write it to a floppy.

The new version also has support for advanced tapehandling features for tape drivers which support them,
including fast searching and quick erasing of tapes. Several new commands give the user more control in automating the program's features and customising it to their preferences.
"Quarterback 6 adds the features that advanced users have been asking for," said Central Coast boss James Bayeless.
"We've added support for advanced features present in the newest high-capacity tapes drives, as well as faster compression and the ability to backup a large hard disk across multiple tapes."

The package costs $£ 79.95$ from Meridian Distribution (081-543 3500). Existing owners of the software should contact the firm for upgrade details which weren't available at press time.

## Greater graphics control

MUTLIFRAME-ADPro is a front end for graphics programs Art Department Professional and Morph Plus that aims to give users greater control over multiple frame processing.

Premier Vision (071-274 4407) claim it to be ideal for creating effects with a large number of images for multimedia applications or output to video.

Its features include the ability to process images over time, with the user giving starting and ending values and the separation being the number of frames needed from the software.

Non-linear motion is available using true splines with adjustable knots, tension, continuity and bias, and fly-ins of moving images are possible using a perspective operator.

Multiple frame/ripples, automatic compositing of foreground images over background and scaling of images during processing are among the $£ 69.95$ program's other capabilities.

## Free online guide

MODEM manufacturer US Robotics have published a free booklet aimed at stimulating increased use of the range of on-line information services available.

The Sportster Guide to On-line Services gives details of the various services which can be accessed using a modem, including several small bulletin boards.

The 40-page guide can be obtained by writing to Sally Roberts, US Robotics, 224 Berwick Avenue, Slough SL1 4QT, or telephoning 0753811180.

# Virgin fund football training 

VIRGIN Interactive Entertainment have sponsored a scheme to teach Britain's kids how to become skilful football players just weeks after England failed to qualify for the World Cup.

The company - publisher of football hit


The company - publisher of football - handed over a $£ 47,000$ cheque recently to the co-ordinator of the Virgin Games Schools Football Initiative at Arsenal's Highbury ground.

The scheme enables schools to use a Dutch method of coaching called Coerver which uses one ball, one-player training instead of the more common 11-players, one ball.

Children of all ages can take part, and after their schools have signed up are asked to find extra sponsorship from friends and family to fund sports equipment needed for the training. Of the money used to set up the scheme, Virgin and the Government each donated $£ 20,000$, and $£ 7,000$ came from other sponsors, including Adidas and a football magazine Shoot!.
"The sponsorship deal could not have come at a more opportune time following England's failure to qualify for the World Cup," said Virgin's marketing manager Paul Dowling.
"Not only does the scheme encourage kids to learn individual football skills, but it will also give Virgin Interactive Entertainment direct access to around 25,000 UK schools."

## Activa come to Britain

ACTIVA, the Dutch maker of ray-tracing and animation software Real 3D2, have opened a British office to give owners of the program free technical support.

Based in London, it is run by a professional games artist Andrew Jones, who also does work for Electronics Arts and was involved in testing the Activa package.

Distribution of the program continues through various dealers but according to Jones the company are planning to open a UK division to handle the product early this year.

Real 3D2 owners needed help and advice should telephone 081-402 5770 between 10am and 7pm on Monday to Fridays or fax to 081-402 5780.

Alternatively, modem owners can contact the Activa UK Support BBS on 081-986 5964 or via netmail at 2:254/516.1@ fidonet.

It has support, message areas, program updates and files for TV Paint, Real 3D Classic and v2, Mediapoint, Piccolo, Peggy and Detail 3.

## Application building

MULTIMEDIA software can now be designed for the Amiga using Helm, Eagle Tree Software's authoring system which is available in Britain from Meridian Software (081-543 3500).

The package combines draw, paint and image processing tools with a scripting language, a database manager and an assortment of user interface objects.

Meridian claim the software enables users to build applications quickly that freely mix graphics, animation, text and music. It costs $£ 99.95$.

## Direct input for CD sounds

MAESTRO Professional is a sound board providing Amigas with digital 16 -bit input and output for compact disc-quality sound and direct-to-hard disk recording.

It is believed to be the first card to take a direct digital signal rather than digitised or sampled input.

Developed by MacroSystem, it comes with Samplitude software and, using an optional back-up program and a DAT recorder, can be used to back up to 2Gb of hard disk storage.

Distributor Amiga Centre Scotland (089 687 583) say the software is a "good sound editing package which provides all the functionality that one expects from such software". "I captured 40 minutes of

CD-quality sound direct across the optical link without any problems at all," said Mick Tinker at Index Information - see London museum story this month, "the data is in the correct layout for use on a CD without modification."

Toccata, meanwhile, is aimed as a high quality, low cost solution for Amiga owners who want to record 16 -bit samples direct to hard disk at up to 48 kHz .

It features three stereo inputs, stereo output, 64 times oversampling and comes with the same Samplitude software as supplied with Maestro Professional.

Maestro Professional costs $£ 612$ and fits into the Zorro II slot of top-end Amigas and Toccata costs $£ 370$.

## DIARY DATES

January 12-15, 1994
BETT'94
Venue: National Hall, Olympia
Organiser: EMAP
(071-404 4844)
Britain's leading $\Pi$ exhibition for the education market.

April 10-12, 1994
European Computer Trade Show
Venue: Business Design Centre, London
Organiser: Blenheim On-line
(081-742 2828)
Europe's largest trade show for the computer and video games industry.

April 16, 1994
Spring All Miero Show
Venue: Bingley Hall, Staffs
Organiser: Sharward Services
(0473 272002)
Last autumn's show contained 70 exhibitors - some with Amiga software and hardware.

September 20-25; 1994
Live '94
Venue: Earls Court
Organiser: News International
(071-782 6893)
Commodore have already pledged their support for this large consumer electronics show.

October 6-9, 1994
BBC Biz Bash
Venue: NEC, Birmingham
Organiser: Haymarket Exhibitions
Future World area of this big show will contain the latest computer games and virtual reality.

October 26-30, 1994
Future Entertainment Show
Venue: Earls Court II
Organiser: Future Exhibitions
(0225 442244)
The biggest public show of computer and video games players and a chance to see Christmas releases.

## Overseas

March 16-23, 1994
CeBIT 94
Vernue: Hanover, Germany
Organiser: Deutsche Messe (010 49511 890)
Europe's premier information technology show often used by Commodore for the launch of new hardware.
$\qquad$

> "...BY THE TIME I REACHED
> THE SCENE, THE DISCS HAD BEEN 'RUBBED OUT'... THERE WAS ONLY ONE THING TO DO. CALL'SIREN SOFTWARE' FOR EXTRA BACKUP!'"

## NEWS

The third North American World of Commodore show of 1993 was held in early December in Toronto, Ontario, Canada. This show marked the first time that CD32 was actually available for sale in North America, with a small shipment of NTSC units having been built just for the show.

As this article was set to go to Press, Commodore were planning their US nationwide of CD32 at the January Las Vegas CES show. The unit has been getting very good previews in the computer game magazines over here, but there's a lot of concern about whether European companies are going to bother with NTSC support for their games, since almost nobody in the States is developing CD32 titles.
Commodore had some impressive fullmotion video demos using the Mpeg module on display. The Star Trek VI demo was exciting, but far more impressive was the European TV commercial shown in both Mpeg and CDXL formats - it was the first time most North Americans had seen a Commodore TV commercial since William Shatner was pushing Vic-20s and C64s in the early 1980 s.

Except for CD32 titles, there was very little new at the show. Soft-Logik were showing the latest Alpha of PageStream 3.0 , which is poised to become a Quark

The show

What's new


## goes <br> <br> on

 <br> <br> on}Denny Atkin sees Commodore in a world of their
and PageMaker killer. GVP's new offering was a new version of ImageFX designed specifically for EGS video boards; there was also talk of a 33 MHz 68040 accelerator for the Amiga 4000.

Digital Creations showed Brilliance 2.0 (the upgrade that was going to be 1.1 got a little bigger). Among the new features are rub-through, the ability to save tween settings, and new animation controls.

The Emplant and A-Max IV Macintosh emulators were on display virtually across
the aisle from each other. After seeing the methods that A-Max IV uses to multitask Macintosh software with Amiga applications, Emplant's Jim Drew posted a note to the nets that he didn't think he was going to have to sue Readysoft after all apparently they use a different method.

On the last day of the show Drew had Emplant running as fast as the fastest Macs, thanks to having installed an Excalibur accelerator in his Amiga 4000. One interesting titbit was that CEI, one of

## own as they hack a path through a difficult winter

Commodore's North American distributors, were going to release a $\$ 2995$ bundle containing a 10 Mb Amiga 4000 , an Emplant with Mac ROMs, and Mac System 7.1 pre-installed.

## The end of the world as we know it?

At one of the keynote speeches, Commodore's Lew Eggebrecht talked about a technically exciting future for Commodore that may have dark overtones for the future of the Amiga as we know it.

In the near future we'll see a costreduced Amiga 4000 and (finally) CD32compatible external CD-ROM drives for the A1200 and A4000 (apparently these drives have already been designed, but were sent back to be cost-reduced since they'd cost about as much as a CD32).

Also, Commodore have finally reached an agreement with Kodak and Philips and PhotoCD support is on the way for Amiga CD.

Eggebrecht said the AAA chip set is coming along nicely, and the company expected the next iteration of prototype chips to be completed in January. Depending on how bug-free those chips are, the new chipset could be nearing production (it's about time, too - 1 recently saw a proposal for the AAA chips that was dated April-1990I).

He said that 24-bit images were being blitted about the screen at speeds faster than the AGA chips can move Ham-8 graphics.

The good news is that Eggebrecht said that Commodore are planning to use Motorola's blazing-fast Motorola 68060 chip in a future Amiga.

This should make for an incredibly
speedy machine that will run the majority of current Amiga software. No dates were given for the release of AAA or 68060 machines, although Fall 1994 was hinted for AAA.

Eggebrecht also mentioned that some future machines would use the industrystandard PCl expansion bus in addition to Zorro III; a modular architecture would allow you to "upgrade" your $68060 / \mathrm{PCl}$ Amiga to use a RISC processor.

The disturbing news, though, was Commodore's plans for the future shift to RISC processors. This in itself isn't upsetting, as the computer industry as a whole is taking this RISCy tack. But Eggebrecht said that Commodore would not be porting the Amiga operating system to run on their RISC machines, but that instead the company would use an "industry-standard" operating system (presumably Windows NT or something similar).

Eggebrecht stated that the Amiga OS would only be available on the $680 \times 0$ series. Sorry, Lew, but AAA chips or not, a machine that won't run Amiga software or the Amiga's spectacular operating system isn't an Amiga anymore.

Hopefully Commodore will wise up and offer an Amiga OS-compatibility mode, similar to the methods Apple use to allow their new Power PC Macintoshes to run $680 \times 0$ Mac software.

## Six points for the Quarterback

Central Coast Software announced a new version of their popular hard-disk backup program, Quarterback. Version 6.0 adds a number of new features that will make owners of high-speed SCSI tape-backup drives happy, but there are also new features for
 those of us who are a little less wealthy and back up our hard drives onto 100 floppy disks.

Faster software-based compression means that you can now compress backups to floppy disks with no slowdown as compared to uncompressed backups, a real boon to owners of slower Amigas. A new backup scheduler lets you schedule automatic tape backups - or any Amiga program - to execute at any defined time.

Quarterback 6.0 now supports backing up a drive to multiple tapes, and will take advantage of advanced features in new high-capacity tape drives. Several new ARexx commands give more control over automating your backups.

The product retails for $\$ 99.95$; Quarterback 5.0 will continue to be available for $\$ 75$. For upgrade information, contact Central Coast Software, PO Box 164287. Austin, TX 78716; phone (512) 328-6650; fax (512) 328-1925.

## Commodore and HP on TV

The hot technology here in the US is the set-top box, which is the unexciting name for high-tech cable TV boxes that will let you view 500 cable channels and make television truly interactive.

Although companies like 3DO and Microsoft have already jumped into the lead by signing with the cableTV big guys, a report in an industry trade magazine says that HewlettPackard has thrown its hat into the
cable TV ring and has looked for Commodore for help.

Apparently HP has licensed the Amiga CD32 architecture (sans CDROM drive) as the basis for its settop box. If major cable companies pick up the HP/Commodore offering (which apparently has a price advantage over many of its competitors), it could mean a nice cash-infusion for financially strapped Commodore.

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You certainly can't find software for your Amiga that's capable of all this...

Before I too become tainted by a mysterious memory disorder that's affected many of those present at the summer launch of the CD32, it's worth attempting to restore at least something for those poor unfortunates who've been hit hardest by this mystery disease.
Although closely investigated, the disease's cause still remains a mystery. However, the search has been narrowed down to that great day when Commodore's new baby took its first step into the open arms of the press and industry bigwigs.

Could it have been the filled rolls strewn across the running buffet? Maybe the bucks fizz held some strange water-borne infection? Who knows for sure?

Fortunately most of the Amiga press have an insatiable need for free lager, and were therefore saved. Unfortunately the Armani set weren't so lucky, guzzling down the dubious orange liquor with gay abandon.
If only the forgetful throng could recall the words of David Pleasance as he drew cheers from the assorted suits by denouncing piracy while singing the praises of CD32 and its pirate-proof design.
Even the prospect of paying a small fee to use Commodore's proprietary CD boot code didn't phase the now deliriously happy software developers - who by this time were openly salivating at the prospect of finally rogering the pirates.
Mr Pleasance went on working the crowd by explaining that even though there are approximately two million Amigas in the UK, a hit game still only sells a pathetic 30,000 copies - more mumbled approval...

At this point, the rhetoric changed tack in the direction of the poor punters who, thanks to the CD32, will enjoy unrivalled value for money as the software houses find themselves liberated from the scourge of the seafaring marauders. Unfortunately it appears this part of the proceedings was worst affected by this mysterious disease. Mr Pleasance followed up with hand on heart claims that CD32 wasn't to be another CDTV turkey stuffed with rehashed non-AGA software at inflated prices.

Mention this particular element to the average software executive and you'll hear your words bouncing around the void left by the bucks fizz. To be fair not all were affected and indeed some have rallied around the CD32 flag with the odd dedicated release which at least begins to exploit the power of the machine.

Unfortunately for the vast majority the temptation to box shift old software has been just too much to bear. As a result many a pensionable program is now being revitalised - but alas not re-written.

Not necessarily a bad thing, I mean what's wrong with a collection of classic programs stuffed onto the near limitless storage space of aCD and sold on to the eager public

at a reasonable price? Nothing at all!
Unfortunately, it appears this is the last thing on the mind of those at the top. Rather than 10,20 or perhaps 300 programs, the average release holds no more than the original floppy.

Worse still, many are simply dumped across, bypassing the AGA potential of the CD32 entirely. Of course there's always the cost of development to consider, which is a very valid point - if you're actually developing something new.

And let's not forget the part which the pirates have played in the equation. Thanks to them we've all been forced to pay ever-increasing sums for software, but now that's all behind us - isn't it?

After all, that's what the software industry has been telling us for years -"it's their fault, we're only trying to keep our heads above the water, every program pirated means less for development..."

But nobody can rip off a CD32 release, so why aren't prices tumbling instead of creeping ever closer to those of Sega and Nintendo? Before gold fever reaches epidemic proportions and joins forces with amnesia it's perhaps worth remembering who pays the bill. Otherwise these temporary disorders may become terminal for the software houses and the Amiga itself. Although I'm not against any-

## As a plague of amnesia sweeps the software industry, we ask if piracy is any worse than profiteering

one trying to recoup their losses, there has to be a limit, and given the fact that all the major software houses have had access to CD32 development systems for over a year there's no excuse for research and development to go on for ever.

In short, let's not sell the CD32 down the river. After all, why should cash-crazed marketing men bugger it up for Commodore and indeed the rest of us?

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The Publisher is a complete DTP package comprising of three disks which we've crammed onto this month's CoverDisks, all of which will have to be unarchived before we can go any further.
As usual, the de-archiving process is launched by booting from the CoverDisk and double clicking the Make icons, so do this now.

There are two archives on the main Publisher disk, one each for the program disk and the fonts disk, and one on the MRBackup disk which contains the PostScript interpreter program, so you'll need three blank floppies.

The Publisher can be installed either on hard drive or on floppies. In the latter case, if running from floppies you will need to have a second drive attached to the Amiga so that The Publisher can read its fonts disk.

## FLOPPY DISK INSTALLATION

As we have already have a backup of The Publisher in the form of the original CoverDisks, there's really no need to install the program disk to floppies as this

has already been done, but there are some things we have to do.

Place the fonts disk in your second drive, making sure it is write-enabled, then double click on the disk icon and the Publisher_Fonts directory until you see an icon called Font_Install.

Now double click on this icon and there will be a bit of disk whirring, during which time the install program will create a list of the available fonts and save the list to the disk.

Installing the PostScript interpreter is a little more complex. Again, make sure you have booted from Workbench, then format two blank disks, calling them PS_Driver1 and PS_Driver2 respectively.

Now place the de-archived PostScript interpreter disk in df0: and the PS_Driver1 disk in your second drive. Open both disk windows and drag all eight icons from the interpreter disk to PS_Driver1. Replace the


interpreter disk with your Workbench disk in df0: and make sure it is write enabled. Now double click on the Publisher_Script icon which should be on the new PS_Driver1 disk.

Two icons should appear, so double click on the PS_Install icon and type the number 6547495 F into the requester when asked for your serial number.
Now double click on the PS_VM drawer in the PS_Driverl window. Double click on VM_Install and you should see a confirmation appear. Now remove this disk and write protect it, then replace the Workbench disk in df0: with the de-archived interpreter disk. Place the second formatted disk (the one we called PS_Driver2) in your second drive.

Open the PS_Driver2 window by double clicking on the disk icon, then double click on the Publisher_Script icon in df0: and drag the icons called PS_DLPs and PSC_Buffer over to your PS_Driver2 disk Now remove the original interpreter disk and store it in a safe place.

Put your Workbench disk in df0: making sure it is write-protected, then double click on the PS_DLPs drawer icon, then on the DLP_Install icon. Click on OK once the program has confirmed installation.

Again, double click on the PSC_Buffer drawer icon, then double click the

Buf Install icon, clicking ok when the program reports a successful installation.

Your second interpreter disk is now safely installed and you should keep it with the PS_Driverl disk for when you print your documents. For setting up the interpreter, refer to the appropriate section later on.

## HARD DRIVE INSTALLATION

Boot from hard drive and insert the dearchived fonts disk in df0:, then open the hard drive window where The Publisher is to be installed. Double click on the fonts disk icon, then drag the Publisher_Fonts drawer across to the target hard drive.

Once disk activity has ceased, remove the floppy, open the Publisher_Fonts drawer just created on your hard drive and double click the Font_Install icon, which will scan for available fonts and create a list which it will save on hard drive. Now put your original fonts disk away in a safe place.

To install the program itself, place the de-archived program disk in df0:, double click on the disk icon and drag The_Publisher drawer across to the target hard drive. Again, once disk activity has ceased, remove the floppy and open the


As many text style options as one could wish for through the Type Style menu never been easier than with this month's superb DTP giveaway, The Publisher

## ?

drawer just created on your hard drive.
A similar icon will appear which is The_Publisher program icon itself, so double click on this to run the program, and when prompted to enter a serial number, type 6547495 F and press Return. The Publisher will initialise itself and run, but for now choose the Quit option from the Document menu.
We now need to install the PostScript interpreter. Insert the de-archived interpreter disk in df0: and open the hard drive window in which you wish to install the interpreter program.

Now double click on the interpreter disk icon to reveal eight icons, all of which should be dragged across to the hard drive drawer you have chosen (it would be a good idea to create a new drawer for this part of the installation).

Remove the original disk from df0: then double click on the Publisher_Script drawer icon which you have just dragged across to hard drive. Two icons will appear, so double click the PS_Ingtall icon and enter the serial number 6547495 F as before and press Return.

Now go back to the main directory where the eight icons are stored and open the PS_VM, PSC_Buffer, and PS_DLPs drawer icons in turn and run the install program which can be found in each
drawer. Each time, a window will appear to confirm the installation which you can close by clicking on OK.

The interpreter is now installed on hard drive and you should refer to the panel on setting up the interpreter before going any further.


## INTERPRETER SET-UP

Once installed, the PostScript interpreter program must be set up to match your system resources. If you have installed to floppies, insert the PS_Driver1


Setting up a page using the Add command and page definition window
disk in df0: and double click on it to reveal the contents, and if you have installed on hard drive open the directory in which you installed the interpreter.

Double click on the icon called PS_Prefs which will open a program window in which we can set default buffer sizes. The interpreter program uses a sophisticated virtual memory routine to minimise the amount of RAM needed to handle PostScript files, which would otherwise by 4 Mb or 5 Mb , and this space is set aside on your floppy or hard drive when the interpreter is running.

For now, leave the defaults as they are, which should be 400 k . There will be enough space on most hard drives and on the floppy for this buffer, so leave well alone for now and choose the Save button to save our preference settings.

Depending on the amount of hard drive space or system memory you have you can raise these defaults later, but they should do for now.

As The Publisher prints to a device known as PSC: , you must first mount the device before using the interpreter. This can be done either by double clicking the PSC_Mount icon every time you want to use the interpreter, or by dragging the

## COVERDISK



PSC_Mount icon to your WBStartup drawer if you have Workbench 2.04 or higher.

All done? Takes a little while, doesn't it? The Publisher is a complex package capable of superb professional results, and the price of this productive power is a certain amount of tinkering to ensure the system is set up properly. Now to use the program.

We have provided a complete step-bystep tutorial on creating a flyer using the program which you will find elsewhere in this issue, so on these pages we will review the various menus and options, looking at how they work and why.

The first step is to load the program, at which point you will notice it runs in hires interlaced. This screen setting cannot be changed and has been forced upon the program because it is the best display mode for detailed DTP work. If you don't
have a hi-res monitor and flicker fixer, or can't run in the newer Productivity mode, flicker can be reduced to acceptable levels by experimenting with contrast and brightness controls on the monitor or TV.

All documents in The Publisher start with the addition of a page. All you'll see at the present is the menu bar and a tool box on the left of the screen. Everything else is blank, so choose Add from the Page menu and a requester will appear with the set-up information for our new page.

Our default settings are in centimetres and an A4 page size, so click on OK to create the page. Now we'll take a whizz through the various options and gadgets.

First stop is the all-important cluster of four icons at the top of the tool box. These represent the four modes we can be in while using the program. Clockwise they are cursor, paragraph, text, and drawing modes, and you have to be in the correct mode to carry out certain operations.

Let's start by creating a box. Click on

## MRBackup Professional

## Authors: MR Software

Originally a commercial product, MRBackup was recently released on a shareware basis, giving all of us an excellent opportunity to sample this professional software free of charge.

Those who wish to carry on using MRBackup Professional will find details in the ondisk documentation of the company's offer of a manual in exchange for a small shareware registration fee.

The program works by scanning a hard drive for all files, offering the user a list of those available for backup, then safely builds a copy of the selected files and directories on a number of floppies. In this way, the user can ensure his or her data is safe from unexpected disasters, a vital if much overlooked practice for all HD owners.

As the program is originally supplied on a disk of its own, we've archived the lot in our usual fashion and you'll have to unpack the archive first. Once this process is complete, boot from your hard drive and insert MRBackup in a drive, open the disk window and double click on the MRBackup icon.

A window will appear with a variety of options and buttons on offer. First, a string gadgets tell the program where its preferences are saved, which by default is on the MRBackup disk and shouldn't be changed. Next there is the home path, which simply tells MRBackup which hard drive to look at first and shouldn't need to be fiddled with as yet. Finally, the backup path is selectable using the third gadget.

This is DFO: for the moment, indicating that MRBackup will use the internal floppy drive to write backups and look for restored data. This can be changed to another drive if you like by clicking on the question mark button. A file requester will appear, using which you can choose to write data to a different floppy drive.

If a second floppy is attached to your Amiga's external drive port, MRBackup will automatically detect this and use it, so there's really no need to change this setting either. Below the string gadgets, four floppy disk icons represent which drives might potentially be available, and those which are not will be ghosted out.

On the right of the string gadgets, several other options are presented, the first of which is a frivolous voice button which, if set to on, will force MRBackup to report all system responses via the Workbench narrator device. Below this is an important button which governs the type of backup media used.

Clicking on this toggles through three settings - AmigaDOS, Fast Disk, and SCSI tape. The first will save all data to normal Amiga disks as normal Amiga files and is rather slow, though it does have the advantage of being ultra safe (paranoid hard drive users take note). The second is the default Fast Disk setting which MRBackup uses for most backups. Fast Disk uses any 3.5 in floppy and formats it as the data is written to the disk, automatically splitting large files across two or more disks to use all available disk space.

The resulting backup disks will only be recognised by MRBackup (so make sure you have a backup of MRBackup somewhere safe!), but has the advantage of being secure, and much faster than the AmigaDOS method.

A third option is available for those with access to SCSI tape streamer devices, the

most efficient and speedy backup method but also one which the vast majority of us will not use.
Tape streamers are huge digital tape devices capable of storing the contents of an entire HD on one tape, but they are usually only found attached to network servers in office settings.
To round off the buttons on the main screen, a row of five gadgets can be used to access the various sections of the program. Options opens a screen on which the user can set the date for the backup, the prefix for backup disks, such as "MyPiocies", and a variety of preference settings controlling how backups and restores are carried out.

This would be a good time to hit the help key to summon MRBackup's excellent online help. Using the Browse, Contents, and Restore buttons we can move through a variety of information screens where tips and information of all kinds are stored.

Use the on-line help for any option on which you are unsure, but there are three buttons we need to take a closer look at. Two of these, marked Compression and Decompression, tell the program what type oc crunching to use on the data being backed up and range from none to 16 -bit. The higher the compression goes the fewer floppies are needed, but backup times increase dramatically.

Third and most important is the button in the lower right-hand corner labelled Verity Writes. By default this is set to "no", which means data saved to a floppy during a backup is not tested for errors, but we would recommend this is always set to "yes".

Backups will take half as long again when verification is turned on, but if dodgy old disks are used the user can find on attempting to restore the data that disk four in a set of 23 is corrupt, which means the data on all subsequent disks cannot be accessed, a nightmare we could all do without.

Now click on OK to take us back to the main screen and click on the Filters button. Filters have to be written using a text editor such as ED, but can be very useful in

# the DISK 

the box icon (see diagram for details) and draw a box anywhere on the page. We tarted in cursor mode, which is used for most things including creating boxes, but If we now want to input some text we'll have to change to text input by clicking on the gadget with a large capital " T " in it.

Do so now and type a word or two into the box. If you don't like
the font we're using, just click on the top right gadget (paragraph mode) then on the box whose contents you want to change.
Now select Alter Current from the Type Style menu. Various options, including changing the font and its typography settings are available, but these are covered in the tutorial, so leave everything as it is.
See how the mode we are in affects what actions we can carry out? If we hadn't clicked on the paragraph gadget the Type Style menu would not have been available. Above all, when using The Publisher you must keep track of which mode you are working in or you may become confused as to why some options aren't working.

Again, another important aspect of the program is the list approach used for all imported text and graphics and for a document's style tags. The list can be seen below the page view area and will be
blank to start with.
When a file is imported for use in a document it isn't pasted straight into the currently active box but stored in the list until it is needed. This approach means, among other benefits, that if a logo is to be used in several places it only has to be loaded once, but bear the list in mind when importing text or graphics in case you're wondering where the image or text file has gone.

Placing an imported file in a box is a simple matter of ensuring that the target box is selected, then clicking on the list entry.
Keep these simple rules in mind and follow the detailed tutorial on creating a flyer and you should find The Publisher a useful and productive tool.
Full details on the cut price manual offer can also be found in this issue for those who wish to delve deeper into this complex package's innermost secrets.

## Faulty CoverDisk?

If you subscribe to Amiza Computing and your disk does not work, please return it to:

Amiga CoverDisk Europress Direct FREEPOST
Ellesmere Port
L. 65 3ED

If you bought your copy from a newsagent and find that your CoverDisk is faulty, please return it to:

Pro-Soft
5 River Gardens,
Business Centre,
Spur Road, Fettham
TW14 0SN
telling the Amiga which files we always want to back up.
For example, DH1 might contain mostly commercial programs for which we have the original disks, in which case we already have a backup, so there's no need to include these.

We might simply want to ensure that, say, the directories containing business letters, PageSetter layouts, and images generated in DPaint or a rendering package are selected for backup, and filters can be written to instruct MRBackup of this. All instructions on the format of filters can be accessed from this screen by pressing the help key again.

Let's go back to the main screen again and click on Backup. From here we can start a backup using the home path set in the main screen and any filters we have constructed, so skip back to the main screen, set the homepath as SYS:Prefs, then retum to the backup screen and click on Ok.

Your Prefs drawer will be scanned for all files (unless a filter was set) and a new screen will appear showing the drawer in a window to the left. On the right, a number of options are available to select or deselect files, and two string gadgets can be used to tell the program which files to include or exclude using standar d AmigaDOS wildcards.

## Directory contents

Double click on the Prefs drawer as listed in the window and MRBackup will display the directory contents, all of which are selected at the moment. To deselect individual files or sub-directories, just click on the file name. To select or deselect a range of similar files, use the string gadgets.

For example, you could deselect all icon files by entering the string "\#?.info" in the exclude pattern string. Once happy that you have selected the appropriate files, three information boxes below the option gadgets will inform you how many entries there are, how many have been selected, and how many disks will be required to complete the backup, which in this case should be just one disk.

Now click on OK and you should be prompted to insert the first backup disk in a drive. Do so now and the program should make a copy of the Prefs drawer fairly quickly. Remember that you should have used the Options screen to set verity to on.

Once the backup is complete you will be asked to remove the backup disk, then prompted to save the backup catalogue to df0:. Confirm that you wish to do this and either save the catalogue to the MRBackup disk or choose a spare floppy to store all your catalogues.

These catalogues are important in that they record the status of all files saved to disk during the backup and are used by MRBackup when restoring the data, so make sure you save the catalogue where you can find it again.

It would also be a good idea to give the catalogue file a more descriptive name such as Prets25Jan1994 to save guesswork at a later date.

Catalogues are only needed when the user wants to select files from a backup rather than splurge the whole lot back onto hard drive, but it's a good idea to save one

## out just in case.

If you don't bother or can't remember where the catalogue was saved, use the rebuild catalogue option from the main screen's Operations menu. This could take some time, but is better than restoring 20 Mb of data just to retrieve one file.

To complete our test run, we can restore the data to hard drive, but this is not recommended unless forced on the user by a catastrophe such as a read/write error.

The first rule of hard drive use is that if it works, don't mess with it, so we'll restore the data to a safe place such as RAM: (it you have a spare 1 Mb or $s 0$ ) or another drawer on the hard drive.

Back on the main screen, set the Home Path to RAM: or a safe directory such as SYS:Storage, then go to the Restore screen by clicking the appropriate button on the main screen and click on OK.

A requester should appear to tell you that a catalogue is only necessary if you want a partial restore (selecting only certain files to retrieve). As we are restoring the complete Prefs drawer, just click on Ignore Catalogue.

You will be prompted to insert the backup disk and the program will read the disk and save its backed-up files in the directory chosen using Home Path.

Once the restore is complete you can check for yourself and a copy of your Prefs drawer should be sitting there gaily waving and smiling, safe in the knowledge that he's been cloned.

That is the essence of MrBackup, and by following the above rules, making sure you set the correct paths and use verify, you should be able to ensure that your precious data is protected from future mishaps.

Use the on-line help for more detailed information on the program's features or, better still, contact MR Software and order a manual. The details can be found in the shareware doc you'll find on the de-archived disk.


## -COVERDISK



## Vidi Amiga 12 fix

Due to an error in the de-archiving script which was used on last month's Vidi Amiga 12 demo disk, the archive failed to properly unpack to a new disk. Please follow the routine outlined below to remedy the problem.

We apologise for any inconvenience the mistake has caused to our readers.

1. Boot from the CoverDisk again and double click the Make-Vidi icon, then wait until the process fails and the de-archiving window disappears.
2. Click in the Shell window at the bottom of the CoverDisk screen and type:

RAK:
if you have a Workbench $2 / 3$. If you have a Workbench $1.2 / 1.3$ machine, replace the CoverDisk in DF0: and type:

C:CD RAN:
3. Ensure that the floppy just formatted by the faulty script is in DF0: and type:

The archive should be unpacked and the new Vidi Amiga 12 disk completed.

## Share Manager 2.03 <br> Author: Ben Muller

If Britain is, as we have been told ad nauseam, turning into a share-holding democracy, the usefulness of a program such as this is beyond question. Share Manager is designed to enable the user to keep track of the value of investments over time, including the all-important values of yield and share price.

To set up a portfolio, we must first select New from the Project menu, then tell the program how much money, or capital, we have to spend.

This is done by choosing Deposit on the Capital menu and typing in a figure. The maximum amount in any one portfolio is $£ 10$ million, so even the more well-heeled among us should be fine.

If anyone out there finds this amount restricting, feel free to post the difference to someone who might make better use of it.

Once a capital limit has been set, type a name for the portfolio in the string gadget to the top left of the program window and start entering those shares. Two types of company are specified, industrial and mining, a distinction made for two reasons.

First, this program was written by an Australian and they tend to have oil and gold (not all of it in cans) out there, and secondly because the fortunes of these two types of company are affected by different factors.

Any company which sells a service or a product and therefore depends upon market demand can be loosely termed industrial



An account with $\mathrm{f1}, 000$ in stocks and ©2,000 left to spend
(yes, even McDonalds), and any company whose value depends on the discovery of new raw materials can be called a mining company (though we can't include Liverpool FC in this category, even if their raw materials are looking a bit three-legged these days).

Selecting the appropriate type of company opens a second window into which the shares can be entered. Use the Buy option on the Share menu to open a small information panel which will expect values for the share name, price (in pence), quantity bought, and so on, after which the block of shares will be entered in the window.

If you don't know what the Yield and P/E values mean, you probably don't have shares, but you can find out in any case by using the Help Me menu available from the main screen.

An option called What are? will open a scrolling list of financial terms, and by clicking on the term of your choice you can treat yourself to a short definition, just the ticket when you've grown tired of watching the videos you recorded over Christmas and want nothing more than to settle down by the fire for a good read.

Share Manager works using the built-in clock, and if you don't have one the program's usefulness will be limited. As long as the date is constantly changing, Share Manager will allow you to update the information on any share block you like then print out a graph of your investment's performance over time.

Ratner isn't as big in Australia as in the UK, so don't expect a graph with its lower limit set somewhere in your basement.

Full details of the various options and how to use them are presented in the on-disk documentation, but as Share Manager doesn't use jargon beyond the average share owner's ken, the millions of you who own bits of the water, gas, or electricity industries should be able to keep track of the missing family silver with relative ease.

## Worms

## Author: Ekke Verheul

Worms is a screen blanker with a difference in that it doesn't wait for a specified time until blanking the screen and the original display cannot be restored by anyone who doesn't know the correct key combination, thus offering a certain security.

Best uses for the program are when printing a long document, rendering an animation, or carrying out some other lengthy task which most definitely should not be interrupted by the prying fingers of small children or other household inhabitants.

Take it from me that coming home expecting three hours of rendering to have produced satisfying results only to find that the cat had run over the keyboard and upset the process after only 15 minutes is a moment one doesn't want to go through too often.

By default, when the program is started, pressing Che control and left Shift keys will turn the worm blank on, while pressing control and left Alt will turn it off.

When on, a number of squiggly lines (euphemistically termed "worms") will wriggle around the screen eating away at the blackness to reveal a spiral pattern until the process is repeated.

## DEATH GRIP

No keyboard input other than the secret off switch and the three fingered death grip (Ctri-left/Amiga-right/Amiga) will be accepted while blanking is in progress, and should you want more security a third key can be added to the off switch by entering its Ascii code in a tool type found on the program's icon.

For example, using the tool type $\mathrm{KEY}=70$ will mean that the delete key will have to be pressed as well as the left Alt and control keys before blanking is turned off. Other useful Ascii codes include 95 (Help key), 80 to 89 (F1 to F10), and 13 ( or backslash key), but others can be found in the Amiga manual or a printer manual.

Ensuring that the third key is far away from the two defaults will keep the risk of someone accidentally hitting the correct keys to a minimum, though I've had to strive hard to find one which is farthest away from the pattern made by a cat's paw prints while walking.

Worms can be launched at startup by dragging the icon into the WBStartup drawer and will not blank until told to. In addition the program has a low priority, so shouldn't slow down any job the Amiga might be doing while you're away from the screen.
Full details of the other options and tool types can be found in the Worms

## Scion

## Author: Robbie J Akins

Scion is a modern geneology program designed to help those who wish to trace and record their family trees, and like any other geneology program is in effect a highly specalised database.

Unlike some utilities of this kind, however, Scion makes no concession to secular or social conventions, and so does not revolve entirely around the nuclear family.

Weddings, when recorded, do not have to be between man and woman, and children do not have to hold the same surname as their parents, thus allowing for divorce, adopted children, second families, and gay spouses.

When loaded, the program displays a window split into three main areas. The main window holds personal details of the person currently being viewed, below which there are a number of gadgets for searching through the list people in the current database. To the right a set of tools are on offer with which relationships can be defined to set up family groups.

If you have ever used a geneology program or carried out research into your family history, you will know that the most time consuming job is the collection of birth, death, and marriage certificates and the collation of the disparate data into some sort of pattern.

The web of marriages and children soon spreads until a simple look back at greatgrandfather's descendants can cover the living room floor with a blizzard of yellowing documents.

With Scion the process is made more simple in that the user just types in the names of


Scion's main screen is where all personal detalls are entered


Tracing a person's ancestors using Scion's family tree display
everyone involved then uses the family group tools to tell the program who married who, when, and where, who was who's child, and so on until the available data has all been entered.

A simple selection on the information gadgets at the bottom of the screen will then enable one to trace fathers, mothers, ancestors and descendants for any chosen person, and a variety of different reports can be committed to paper via the print menu.

An example file, imaginatively entitled "Example", can be found in the same directory as Scion and should now be loaded to demonstrate the capabilities of the program.

The database holds the details of 108 people grouped into 34 family groups ranging across several generations and is a good illustration of how Scion works.

Starting with Albert Smith, born in 1947, we can trace the Smith family backwards and forwards to the oldest known relatives and the most recent children. Click first on the Anc (ancestors) button and a screen showing Albert and his parents on the left will pop up.

The previous two generations are displayed to the right, so click on Albert's greatgrandfather, Charles Smith. We are returned to the Personal detail screen where we can see that Charles was born in 1848 and worked as a bookseller.

To trace Charles's descendants, click on the Desc (descendants) button and a tree will be shown in which male relatives are displayed in blue and female in red.

We can go down the generations by clicking on names farther to the right, but notice for now that spouses are marked by an $S$ and that children, the next generation, are indented one level to give us a clear picture of how the family has progressed through the years.

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# The Amiga Computing CoverDisk is designed to be as simple to use as possible. Follow these instructions and you'll be up and running in no time! <br>  

New readers may have difficulties using our CoverDisk, so we have included this page to help you out. Below we explain how to copy files from one disk to another, how to copy the entire CoverDisk and how to de-archive programs. None
of the first things you must do when get your CoverDisk is make a backup copy, then put the original CoverDisk away for safe keeping. As a rule you should also do this with the majority of your software collection.

## How to make a backup

To copy the entire CoverDisk, load up, your Workbench disk, then either click once on the CoverDisk icon and select Duplicate, or select Copy from the Workbench menu, or open $\mathrm{CL} /$ /Shell and type:

## 01skcopy fron pfo: To Dfo:

When prompted, put your CoverDisk (the source disk) in df0: and be ready to replace it with your blank disk (the destination disk). Follow the Amiga's on-screen prompts until the disk copy is completed. Now put the original away in a safe place and use your backup.


## Copying individual files

You might at some point want to copy a single program from a CoverDisk to your compilation, Workbench disk or even your hard drive.
To do this you'll need the COPY command. As most CoverDisk programs are stashed away in their own directories, the quickest way to copy a program is to copy the whole directory at once. Use the command:

COPY (directory) To (nexdisk) ALL
where \{directory) is the full pathname of the directory you wish to copy, and (newdisk) is the name of the disk and directory into which it will be copied.
For example, if you wanted to copy a utility called FRED from CoverDisk 27's Utilities drawer to a directory called FRED on your Workbench disk, you'd type:

COPY COVERDISK27:UTILITIES/FRED TO VORKEENCH1.3/FRED ALL
Alternatively, you can click once on the FRED directory icon and drag it across to the new disk's window. This has the advantage of creating a new directory for you and copying the icon as well.

Once you have moved a particular program to where you require it you could experience some problems running the program. This is sometimes caused by the program not being able to find files which it needs to run.

A good example is the text files on the CoverDisk. These have been crunched using PowerPacker, so when you try to copy them to another disk and then try to read them you can't unless you have also copied the Powerpacker library into your LIBS drawer.


So if you have copied a program from the CoverDisk to your Work disk or hard drive make sure you also copy any other files the program requires, ie fonts, libraries, device drivers and Ccommands.

## De-archiving

Occasionally we have so many programs to fit onto the CoverDisk that we have to archive them. Archiving is where we take the entire contents of a disk and compress them into one file which is much smaller, giving us space to fit more programs onto the disk.

Dearchiving programs which are on the CoverDisk is a very simple task. If a program has been archived then you will need a blank disk to dearchive it onto.

Say we have archived a program called FRED. You simply double click on FRED's icon, and will be asked if you have a blank disk ready to dearchive to. Type "y" or " n " accordingly.

Your computer will then copy the archived file into its memory and ask you to insert your blank disk. It will proceed to format the disk, and will then de-crunch the archived file onto your blank disk.

Once this has been done you can simply reboot your machine with the disk which contains the dearchived program on it and then use the program as instructed in the CoverDisk pages.

Note that if you have a Workbench 2 or upward machine you must boot with the CoverDisk writeenabled to perform the dearchiving process.








## Workbench 3

If you have a Workbench 3 machine, don't worry - most if not all of the programs on the CoverDisk will work on your machines.

If the program is specifically designed to work with Workbench 3 then you may have to copy the program to your hard drive or Workbench disk using the process described earlier on this page.

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Ialways said that the Amiga was the perfect creative computer. Nobody really paid much attention to me originally, partly because the Amiga was a bit of an unknown quantity at the time, but mostly because I used to slam my hand on the table when I said it.

Ahem. But the fact remains I was right, and more artists and creators of all sorts are using the Amiga for their work as well as their play.

Ever since some bright spark at Commodore US thought of using the late great Andy Warhol and Deborah (aka Debbie) Harry at the launch of the Amiga, our machine of choice remains a firm favourite with creators of all kinds, but particularly artists.

Warhol in fact continued to use the Amiga up to his death, saying in 1986: "The thing I like most about doing this kind of art on the Amiga is that it looks like my work."

Laurie Anderson used to use the Amiga for her stage shows, grabbing in animated sequences from video using the old LIVE! digitiser and using them as a projected
backdrop for her performances
Admittedly now a lot of the Amiga artists working in the world today use the video capabilities of the Amiga, and none more so than users of NewTek's Video Toaster, which is still taking Hollywood by strategy.

The Post Group use the Amiga on many TV projects using both the Toaster and ASDG's Morph Plus. Recent projects include The Tommyknockers, a Stephen King TV movie, and the popular BBC 2 time travelling series Quantum Leap, both of which used morph effects created with MorphPlus.

## INDIE

Jeff Ginn uses Amiga technology to produce special effects for the popular Young Indiana Jones Chronicles series you can't fail to have seen if you have Sky One, either through the dish in your roof or on cable.

- Although some of the other effects made using the Amiga are perhaps more glamorous,


## Ron Thornton

Anyone who reads Amiga magazines or watches $T V$ will be aware of the work of English special effects wizard Ron Thornton. He was a leading effects man in the UK on cult shows like Blake's Seven, and now is the creator, with his US-based company Foundation Imaging, of the visual effects for the Emmy award winning sci-fi TV show, Babylon 5.
${ }^{7}$ started out in model making, and doing effects more traditionally. My partner and I had been fascinated by computer graphic imaging for some time, llike way back to the old Apple II days. There were boards around at about $£ 10,000$, and you could just render 24 -bit images on them and I thought they were fabulous.
"But you never got a chance to play with 3 D , as in modelling, animation or anything like that. After having worked in Canada on a show called Captain Power and the Soldiers of the Future, I went and bought an Amiga and started playing around with some
of the packages that were available like Sculpt 3D and those ones.
"It was fun but it wasn't a production tool. It couldn't do anything but HAM, and nobody had 24 -bit. So when the Toaster came out it was like, well give it a try. It's got a 3D package with it, it can't be any worse than Turbo Silver or Imagine. It was actually very good. I said to myself I'll see if I can make something from scratch in 30 minutes. And I did. So it passed the test.
"After that it was just a question of if could do what I do normally but in the com-


Dr. Who was Ron's earliest success
puter. So I just set to re-building a miniature that I had made years ago for Blake's Seven and make it in the Amiga, and it worked very very nicely.
"The thing is you're really striving to make something look fairly real, but at the same time give it a certain flair. Being one of the thirtysomething brigade I was brought up on Thunderbirds, Captain Scarlet, Dan Dare and stuff like that, so a sense of style and colour is something that I've always had.
"I've always felt that the Star Wars movies seemed to miss that with their grey


Ron's latest work is stunningly detailed

> The gap between the big boys and us is closing rapidly

spaceships. But Thunderbirds was great, it was very colourful, and obviously inspired by Frank Hampson and Dan Dare. So we thought 'let's bring a little bit of that to a mainstream TV show'. So we've ended up coming up with pretty colourful stuff.
"ti's a very neat show, the script is very good. Compared the to the actual series the pilot was rubbish. The series is great, the concepts are great, the effects are so much better than the pilot. The pilot was very much a leaming process for us.
"They were very brave in taking the risk, because nobody had done a TV show like that before. It was like an ordeal by fire. Can you produce this number of shots in

## The thing I like

 most about doing this kind of art on the Amiga is that it looks like my workAndy Warhoi

what Jeff produces is just as important. He makes a great deal of the signage used in the series, like posters and signs above shops, and all in the style of the 1920 s .

The exciting science fiction series Butvion 5 is coming to Channel 4 in March 94 - another show which relies on the Amiga to create its visual effects.
Ron Thornton, ex-BBC special effects man on such historic shows as Dr Who and Blake's Seven, now lives and works in the USA, and works almost exclusively on the Video Toaster.

You can read what he has to say about
the Amiga in a moment, but it's becoming clear that the Amiga can deliver not just as-good-as results, but better than.
On Speilberg's Jurassic Park, what they call "pre-visualisation" of the monster dinos was done by Stefan Dechant of Amblin Imaging. Amblin also do the SFX for the SeaQuest series, and now have over 60 Video Toasters.

## STAR TREK V/

Already effects which Amblin have achieved before only with Silicon Graphics workstations are now being done with fairly ordinary Amigas with enough memory and CPU power.

Then there's Star Trek VI, which also featured Lightwave-generated graphics by Post Group associate Joe Conti, with the USS Enterprise and USS Excelsior modelled by none other that Lightwave creator Allen Hastings. Joe Conti is also responsible for an episode of Unsolved


Mysteries featuring some pretty realistic UFOs. Now we see the Amiga turning up in all manner of places, especially in the music community. There are a lot of musi-

> More than ever the Amiga is making inroads into the real world, proving itself to be the ultimate creative computer. Phil South talks to working artists who use the Amiga as a key player in their creative universe

artis stic Amiga


Jurassic Park dinosaurs were modelled in Lightwave before being rendered on an SGI machine
this amount of time? No other way could you possibly do it. "We're doing 10, 15, 20 shots a week sometimes, which is phenomenal. Star Trek: The Next Generation has about five new shots a week, plus a bunch of screen displays. And we're a quarter of their price! We only have an animation crew of five. We're not working on anything else at the moment... at least nothing I can talk about to an English person.
"We're running 2000s, some running

RCS 040 boards, some CSA. We've got 32 Mb of memory on all of them, and we run that into a Novell Netware server. Oh yes, and the new version of Lightwave is amazing.
"I mean, right now on the screen in front of me I'm animating a dinosaur. How long ago did they do Jurassic Park? Now you can do it all on a desktop computer! The gap between the big boys doing it and us doing it is closing rapidly, which is a lot of fun."


Some of the superb Lightwave Images from Babylon 5

## ■FEATURE

giant Mr Hom, and Wil Wheaton who plays Ensign Wesley Crusher. Wil actually works for NewTek now, and can be seen demoing the Toaster at all the shows they attend.

OK, so the Video Toaster has converted a lot of people over to the Amiga, but you can't rule out the obvious charms of other programs like DPaint, Imagine, Real 3D and OpalPaint.

A lot of artists are now turning to com-

puters in general and the Amiga in particular to provide a creative solution to the problem of making art which is new and computer based.

It's going to take a little while longer for people to begin using computers in a really special way, and now 24 -bit is within almost anybody's reach I think we'll start seeing the end of all the same boring old video tricks.

The Amiga is, after all, the best creative computer of the last decade, and it's up to artists like these, and you too, to make sure it makes an even bigger splash in the art world of the future.


## Dave Gibbons

don't understand. I'm quite happy to use things I don't understand.
"I've had an Amiga for some years now, and although I got it initially for games, l've also used it for drawing. can see the huge potential for doing very useful things with computers.
"Something should be done about the input side of things, there's something about it which makes it a bit hard to draw. There's something about the fee of pen or pencil in contact with paper that you just don't get with a mouse or a stylus and graphics tablet.
"I don't think l'll be really using a computer for drawing comics. I think what computers are really good at is colouring, rendering in the artistic sense. I mean, if you want to get say a sky which graduates from a deep blue down to white you can do it with an airbrush.
"But then you've got to clean it out after each ink, blow through it to make sure it's working properly, mask out all the areas you don't want the ink to go on, do it, and if the phone goes halfway through and makes you jump, you've got to do it all over again.
"It's a very labour-intensive thing. And if you don't like the look of it after you've finished you've got very little scope for changing it other than doing it all again from scratch.

## Bradley

Brad has been around on the Amiga for a long time, as many of you will be aware. He is a great 2D Amiga artist, and his painted graphics have decorated a number of magazine covers, but recently he's gone all 3D and created the 3D scenery for a game soon to be out on the CD32, Labyrinth from Electronic Arts. All the graphics for Labyrinth were rendered with Imagine version 1.1 and 2.0 .
"It was interesting. I had done painting but I'd kind of gotten dissatisfied with painting because I felt it was a very passive thing. I was looking for other things to do, and I was looking for things other than graphic art.
"Then about 1987 I got my first Amiga system, and discovered that there was a lot of potential there for doing things that were interactive. Something that would involve you more than a static painting does.
"T had friends who were interested in the Amiga and I looked a couple of differ-
ent things. I'd looked at the Apple Macintosh, but it wasn't very interesting at that time because it was just black and white. I looked at the Apple IIGS but it
was much more limited in colour, and that pretty much led me eventually just to the Amiga. I got awfully excited about it the more I learned about it, and really couldn't rest until I got my hands on one.
"What I like about the Amiga is the multitasking. Even though I don't often


The stunning graphics of Labrynth. Soon to be out on the CD32?

## I see the computer being

 used as a tool like ant other"The things I like about the Amiga are that it's cheap, it's very user friendly, and I think DPaint is a superb painting, rendering and animation package.
"I got involved in the game because to make a long story short, I did a comic called Watchmen (DC Comics) which at one point was going to be developed as a game and a film, but nothing ever came of this.
"One of the people I met was Charles Cecil, then of Activision, who subsequently set up his own company called Revolution. I've always been very keen on collaboration, so I found myself doing all the background screens and a good part of the design work for Beneath a Steel Sky.

I designed the characters too, and from those designs also did the sprites. The backgrounds were drawn and scanned into the Amiga for treatment. The sprites were done directly into the Amiga because sometimes you design a big detailed character and it's hard to cram all that into a sprite.
"I found that really interesting, like how putting a little single pixel of blue on a face, say, makes a character look like he's got a beard. I think the collaboration worked well, it was a great experience and I'll be happy to do a lot more of this sort of thing in the future.

disk to come back. But by the time I'd gotten the stuff back, 1 had already done complete pictures painting with the mouse, so it must have gone pretty quickly.

The thing that really broke it for me
was I went to a show where Jim Sachs was speaking and showing his work. I'd seen a little of his work already, and he was talking about how he had done everything using the mouse. I just went home and I thought, well, obviously it

can be done. "I just went ahead with it and worked with it until finally it became natural. It's like any other tool, you just have to get used to using it until you don't really think about it being there. In fact I still use a mouse, I don't use a tablet, although I'm thinking about trying it again.
"I tried it several years ago, and 1 just didn't care for it. For some things I'll still continue to do it on paper and scan them in, just because the idea of something which emulates drawing on paper seems kind of silly to me.
"It's perfectly easy to draw on paper, and it's very direct and you can draw on ten sheets of paper out on your desk at the same time. There's something very immediate about working with paper. But I'm interested in some of the painting techniques that use pressure sensitive tablets. That's probably why I would give it another try.
"Right now I'm using TVPaint on a Retina, we also have OpalVision. My partner and I, as well as the games software, have done an animation program which works on different frame buffers

and so we've gotten kind of a collect of them now! So we have an OpalVision, but I haven't actually had a chance to play with it because my partner's got it.
"The CD32 version of Labyrinth was the first version, but it turns out they published the MS-DOS version first. But it's being published in the UK by Electronic Arts. So we don't actually know, we get it all third-hand. It was supposed to go out a week ago, there was a delay something about Commodore silk screening something onto the disks."

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[^2]SAMPLERS

Digital sound sampling has for long been one of the most popular enthusiast uses for the Amiga, but with the recent explosion in CD-ROM technology, the multimedia boom, and the need for high quality video sound effects, sampling has broadened from its original 8 -bit base to a market where just about any option you wish can be supplied by one manufacturer or another.

The profusion of samplers has meant that customer choice can sometimes take on bewildering proportions, leading us neatly into a comprehensive look at the units on offer and their relative strengths.

As usual, our first step is to provide some info for anyone wanting to know where to start. The bottom line here is that you'll need a piece of hardware called a sound digitiser, plus the software to control it.

Most Amiga sampling packages include both hardware and software and with the higher priced units you'll get extras like line level and microphone level inputs, signal volume controls, switchable parallel through port connections (so that the digitiser can be left permanently plugged in) and other goodies.

Lower-priced sampling units will often have no controls at all, but this does not mean that the results obtained will be less useful. With care excellent results can be obtained from budget priced hardware and, since these types of 8 -bit Amiga digitisers start at around $£ 20$, this is not an area that will necessarily frighten the bank manager!

All 8 -bit sampling units attach to the Amiga's parallel port. Plug one end into the sound source (which might be a tape recorder, CD player, microphone, or some other audio signal source) and the other end into the parallel port.

## SAMPLING

Having switched on and booted up the sample editing software the rest is comparatively easy. Set an appropriate sample rate, adjust the volume of the input signal to a suitable level, and then just hit record. Your sample will end up sitting in the editor waiting to be saved or edited.

The key to good sampling is to get a good input signal to start with and, where possible, this means sampling a sound directly from source rather than using a microphone.

Ideally, a strong, clear signal is provided to the digitiser without overloading the unit and causing clipping, so with digitisers which have no signal controls it is necessary to adjust the volume of the sound source being used.

Don't forget that your samples and music will sound much better if you use external speakers rather than those present in your Amiga monitor or TV. There are plenty of reasonably priced amplifier and speaker systems available and if it is physically convenient you can even use your hi-fi system.

Sound enhancers which boost particular audio frequencies can further improve the quality of the Amiga's audio output but if that's still not good enough the answer is to spend more and go for a 16 -bit sampling system. When you reach for the top of the range 16 -bit offerings, however, Bank managers do start to feel a little faint.


## SunRize AD1012

Available From: White Knight Technology Price: $£ 499$

The AD1012 audio card provides 12 -bit digitising which, in terms of resolution, is halfway between ordinary Amiga internal sound quality and a CD. It comes complete with SunRize's Studio 16 recording and editing software which can record and playback directly from hard disk.

Although it is only a four-track mono system you do in fact need a hard disk system with quite a fast drive to get the best out of this digitiser. If you are thinking of
intensive use with, say, an A2000, you are likely to need a 68030 accelerator card as well.

## SunRize AD516

Available From: White Knight Technology Price: £1299

The AD516 takes us about as far into the professional sampling league as the Amiga currently goes. It is a very high quality eight track, 16 -bit, mono/stereo sampling system for serious users (or seriously rich users). The software which comes with the AD516 is Studio 16 and this provides
direct-to-disk recording and SMPTE links for use with packages like the Broadcast editor.

Needless to say you need a fast machine and a fast hard drive to get the best out of this unit. A new release of the AD516 package is expected in the very near future (probably before you read this).

## AMAS II <br> Available From: HiSoft <br> Price: $£ 99.95$

An upgraded version of the previously popular AMAS 8 -bit sampling package.

## Clarity 16

Available From: HiSoft Price: $£ 149.95$

This is a 16 -bit system that can sample at up to CD rates ( 44.1 kHz ) and convert between 8 -bit and 16 -bit formats so you still have IFF 8SVX support as well as 16 bit file format support.

Samples can be played both through the stereo 16 -bit cartridge output or through the Amiga's standard output channels. The hardware includes an integral Midi interface and the software provides a sample sequencer and options for using the Amiga as a sample-based Midi sound expander. Clarity 16 's software has improved considerably since its early days but since it cannot record and playback directly from disk you still have


Some early bugs gave Clority 16's software a less than ideal start but recent changes have produced substantiol improvements. This is still the cheapest way into the world of 16 -bit sampling
to work with 16 -bit samples totally in memory. To get the best of out Clarity 16 you need one of the newer, faster, Amigas and upwards of 2 Mb of RAM.


Software adjustable input-level controls are provided and, as well as the usual cut copy and paste editing controls, there are a whole range of effects that can be produced (echo, phasing, chorus, reversal and so on).

It is also possible to overlay samples, swap and copy channels, fade in and out, and do things like stereo bouncing. Sampled sounds can be saved in IFF and

## 8-bit us 16-bit

16 -bit sampling systems provide much greater waveform detail and it is this that produces the improved quality. An 8 -bit unit will measure sound signal amplitudes and store them using a relative numerical range of -128 to +127 .

16 -bit samplers use a $-32,768$ to $+32,767$ resolution scale which is the same as used by a compact disk. The disadvantage is that working with 16 -bit samples is more processor intensive and the samples themselves take up twice as much space in memory. A solution to this latter problem is the direct-to-disk approach.

Users of direct to disk systems, however, face the second big problem, which is the huge amount of hard drive space gobbled up by stereo 16 -bit samples, which can run to 10 Mb per second if the sample rate is high enough.
raw formats, and in a new executable form that allows samples to be played outside of AMAS II simply by clicking on an associated icon.

The software also includes a 3D FFT (Fast Fourier Transform) display and a dual real-time spectrum analyser. A small, but reasonably useful, sample-oriented Midi sequencer is also provided and you even get a microphone thrown in as well.

## Audio Engineer Plus V2

Available From: Hobbyte Computers Price: $£ 149$


The RamScan/GSOFT Audio Engineer offering has been the best 8 -bit Amiga sampler around for ages. It is solidly constructed with switchable microphone and line inputs, signal level adjustment, printer

## TechnoSound Turbo

Available From: New Dimensions Price: $£ 39.99$

Cheap but well designed hardware and software stereo/mono 8 -bit sound sampling package which is ideal for new users. It comes with a small, though reasonably informative, manual and best of all it is capable of producing good results.

The software is more than adequate for basic sample editing and it can create all the usual types of effects (echo, fading, vibrato, phasing and so on). RAM scans, sample loop conversions, and a range of novelty effects can be achieved and easy to use song and Midi sequencers are also included.
The package includes an audio source connecting lead and nearly 60 pre-recorded samples so you've got everything you need right from the word go. TechnoSound Turbo has been one the Amiga's most popular offerings.

## TechnoSound Turbo 2

## Available From: New Dimensions Price: $£ 49.99$

Everything that TechnoSound Turbo was, but better. Both the hardware and the software have undergone design changes and, for newcomers, the sampling and editing software is much easier to use. There are customised pull-down menus and things like direct to hard disk recording, so it is sure to be a winner.

At the moment existing TechnoSound Turbo users can upgrade to this new version for $£ 15$.

## Audition 4

Available From: Silica Systems
Price: $£ 34.95$
This piece of 8 -bit sound sample editing software comes from SunRize, a company that know an awful lot about Amiga sampling. Audition 4 is an excellent piece of software with a great many useful features including being able to preview and adjust effects in real time before making permanent edits, and direct recording to disk or RAM. A very capable program and again very good value nowadays.


## Editing sofinvare

Once you've taken a sound sample you can edit it in many ways. It is possible to rearrange sections of the sound, alter the pitch of voices, add echo effects, perform re-sampling calculations, or even reverse the sample so that it plays backwards.

The important 8 -bit sample editing facilities required by users are now very well established and all but the very cheapest 8 -bit offerings provide a useful set of editing and effects options. If you are looking for standalone software to use with digitising hardware that you already have then AudioMaster IV and Audition 4 are particularly good value nowadays.

Public domain and shareware utilities can also be a great help to the budget sampling fiend, and a range of effects generators, direct to disk recording and playback tools, and other cheap and cheerful programs can be yours for only a few pounds.
$>$
switch-thru connections (so that the digitiser can be left permanently plugged in) and above all a quality by which all other 8 -bit Amiga samplers have been judged.

The associated sample recording and editing software is also extremely good and as well as offering all the usual types of edit effects the software provided time stretching and time compression, frequency cut and boosting via software filters, and very powerful loop creation facilities.

The price of Audio Engineer has dropped considerably of late and this could mean that a new ( 16 -bit?) offering is imminent.

## Audiomaster IV

Available From: Antic Computer Systems Price: £44

This is the Aegis release of RamScan's Audio Engineer Plus software and needless to say it's pretty good. In fact it is generally regarded as the best Amiga 8 -bit sampling software around and certainly good value at the current price.

## Megamix

Available From: Indi Direct Mail Price: $£ 29.99$

Budget priced sampling 8 -bit hardware and software package. The hardware does what it is supposed to well enough but that's about all that can be said.

Available From: Power Computing Price: £49

Generalised music package which includes an 8-bit hardware/software sampling system. As far as value for money goes the Music Kit compares well with other offerings in the same price range.

## Sound Trap

Available From: Omega Projects Price: $£ 24.95$

Budget mono 8 -bit digitiser whose hardware includes a parallel port passthrough connector so it doesn't have to be unplugged to use a printer.

Sound Trap comes with its own software but most users prefer to use it with something like AudioMaster. The quoted price is for a ready-built unit, but if you are into do-it-yourself you can buy it in kit form and save yourself a fiver.

## Stereo Master

Available From: HiSoft Price: $£ 39.95$

An 8 -bit stereo/mono sampling package which includes both hardware and software. Offers the same basic types of facilities, quality, and ease of use as products such ds TechnoSound Turbo. Megalosound is a better buy.

## Stereo Sampler 2

Available From: Trilogic Price: $£ 29.95$

Not a bad offering by any means but it is essentially just the 8 -bit digitising hardware that you buy. You do get some very basic sampling software but for any senous use you'll need a proper sample editing package.

## Jargon

clipping A waveform distortion causec by a signal being too strong for the input circuitry of a recording or sampling device. The result is a poor quality sound
fragmentation As a hard disk is used and files are created and deleted, pockets of empty disk space are formed. Because new data is stored in the first areas d empty space that are found, files are broken up into sections that are physicall remote from each other. This fragmente tion means that it takes longer to bot store newer data and retrieve it, so the result is that the hard disk appears t: slow down.

IFF 8SVX This is the IFF (Interchange File Format) type used for storing sounc samples.

# Digital Sound Stuclio DSS8+ 

Available From: Silica Systems Price: £69

This is the recently upgraded version of the popular GVP DSS8 8-bit sampling system whose hardware now comes in a clear see-through plastic case. DSS8 + is well thought of, has reasonable documentation, and includes things like software controlled ingut levels and microphone/line switches (which makes it easy to adjust input signal strengths). The upgraded software now includes an ARexx interface.

Obviously with the arrival of numerous 16 -bit boards a new 8 -bit system would appear to face an up-hill battle, but rest assured in the field of 8 -bit sampling DSS8+ is among the best in the business.

The real attraction of the system is its all-in-one approach with sampling, editing and song construction all part of the same system, which evolves as you progress through the production process.

Fortunately the software has adopted the familiar tracker format so MED fans won't have any problem adjusting to the program.

In short, if you're looking for an 8 -bit solution to your particular sampling problems it's ideal.

# Datel stereo sampler 

Available From: Datel Electronics Price: $£ 49.95$

Eight-bit sampling hardware and software package.

## WaveTools <br> Available From Blittersoft Price $£ 349.95$

This is a brand new 16 -bit audio card that works with the A3000, the A4000, and accelerated A1500 or A2000 Amigas. A full review can be found in this very issue, so there's little point in going on about it here, is there?

## buster

loop A portion of a sample that is repeated to either sustain a note or create some special effect.

RAM scanning A facility which allows you to scan through the Amiga's memory and, by "playing" the data, look for sound samples. The act of extracting the samples from memory is usually called "ripping".
raw sample A copy of the byte values of a sound waveform just as they appear in memory as opposed to a sample stored in a specially designed file structure such as IFF 8SVX.
re-sampling Converting the waveform data of a sample taken at one frequency to the equivalent values at another fre-


## Megalosound

Available From: HiSoft Price: $£ 34.95$

This new 8 -bit budget sampling system comes with a well built cartridge (fitted with a volume control) and a good manual. The software provides waveform printing, special effects, a stand alone sample player, and even direct-to-disk sampling. It's an ideal choice for the newcomer to sampling who doesn't want to spend the earth.


## Recording to disk

Most sound sampling systems store and edit the data they collect in the Amiga's chip memory, restricting the sample size to the amount of chip memory available. Reading samples and placing them directly onto disk eliminates this restriction but it's not easy to do and, as always, there is a price to pay.

Firstly, you need a hard disk. Without exception, direct-to-disk recording and playback always refers to hard disk use. Floppy drives are just not fast enough to perform this sort of magic, though a number of PD utilities exist to enable low quality sampling to floppy.

Secondly, you will find that with the lower cost packages the maximum sampling rate obtainable is considerably lower, and is often less than half that obtainable with the conventional mem-ory-based approach.

Thirdly the performance of any direct-to-disk system is going to vary according to the speed of the hard disk, and the extent of its fragmentation. Lastly, this sort of hard disk use is very read/write intensive and slightly more error prone than conventional disk use.
It is best to create a separate partition for direct-to-disk sampling because if something untoward does happen you will then only lose the data associated with that partition.

A number of 8 -bit sound samplers now provide direct-to-disk facilities, but at present there are no cheap equivalent 16 -bit products. This, however, is an area that is definitely on the move and new offerings are just around the corner.
Remember however that 16 -bit sound sampling hardware may not be the end of the expense - top of the range 16 -bit sampling packages like the SunRize AD516 need to be used with fast Amigas and fast, high-capacity hard disks.

After your very first minute of CD quality stereo (two tracks sampled at 44.1 kHz ) you will find that 10 megabytes of storage space have gone. It's quite likely that newer, low cost, 16-bit boards are still going to need the support of powerful Amigas to get the best from them.

## Contact numbers

Antic Computer Systems Blittersoft Datel Electronics Emerald Creative Technology Hobbyte Computing Indi Direct Mail
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New Dimensions
Omega Projects
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Silica Systems
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| Techno Sound Turbo.......... PROGRAMMING |  |
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ProPage


Wer Tre


The best way to learn how to use any program is to roll up your sleeves and dive in. Using The Publisher, like any DTP package, can be confusing at first, so we've chosen the format of a simple one-step-at-a-time tutorial which should see us create our first simple project, a single page leaflet.

All keyboard short-cuts for menu options are shown in brackets. For example (Amiga-P) means hold down the right Amiga key - the key directly to the right of the spacebar - and while still holding down the right Amiga key, press the P key. OK, let's get started!

Select Add from the Page menu (Amiga-P), click the A4 option and then click OK. From the Magnification sub-menu in the Preferences menu select Full Width (Amiga-W). From the Measurement sub-menu in the Preferences menu select Inches/Points.

From the Imposed Grid sub-menu in the Preferences menu select Define (Amiga-I). Click the 18 button, and then click Absolute. From the Graphic submenu of the External menu, select Import IFF. Use the file requester to find the file called TRA-LA.IFF on the CoverDisk. Click once on the filename, then click OK. Notice that the name of the file appears in

## create a leaflet

the tags list to the left of the page. From the Import Text sub-menu of the External menu, select Generic. Use the file requester to find the file called VENUE.TXT on the CoverDisk. Click once on the filename, and then click OK. Notice that the name of the file appears in the tags list to the left of the page.

Make sure the Null Pointer gadget is selected (the arrow gadget at top left) and then from the Imposed Grid sub-menu of the Preferences menu select Temporary Show (Amiga-T). Click once on the Rectangular Box Creation gadget (top left in the lower bank of tools). Move the mouse to position the crosshairs at lin down the page (the $Y$ direction) and 0.25 in
in from the left (the $X$ direction).
The crosshairs position is constantly updated in the rulers above and to the left of the page. Because you imposed a grid during preparation, the crosshairs will move in 0.25 in steps, making it easier for you to position them accurately. Click the left mouse button when you have the crosshairs at the correct position.

Now move the crosshairs to 7in down the page and 8 in across the page (about 0.25 in in from the right, that is). Click the left mouse button again. A bounding box will appear on the page.
Click the grey area in the Screen Position gadget (just above the tags list) to move the view to the bottom half of the
page. Click on the Box Moving gadget (bottom left in the lower bank of tools) The box you have just created is now attached to the mouse.

Move the box so that its bottom edge is positioned at 10 in down the page, ensur ing that the left edge is still at $0.25 \mathrm{in}=$ from the left of the page. To place the bor in its new position, click the left mouse button once. If you make a mistake, clidi the Box Moving gadget again and re-position the box again.

When you have the box positioned cosrectly, click the TRA-LA.IFF item in the tags list to place that graphic into that bos A grey rectangle will appear in the center of the box. From the Graphics sub-mens of the Preferences menu, select Display Page to unhide the graphic.

The graphic is not big enough for orr needs. Select the Graphic Fitting gadgrt (Mottom right in the lower bank of tools) 1 es expand the graphic to fill the box we have created for it.
Now create a rectangular box whose top left position is $\mathrm{X}=0.25 \mathrm{in} \mathrm{Y}=10 \mathrm{in}$, and whose bottom right position is $X=\sin Y=$ 11 in . $X$ means across the page, $Y$ means down the page.

Click the big T (for Text) gadget in the upper bank of tools. A small text gadger will appear underneath the lower bank al tools. Type EVERYONE WELCOME Finish text entry by clicking the Nel Pointer gadget.

## SET STYLE

The text is set in the default $B O D 7$ TEXT style. To make it look the way mer want it to look, we must first set up a new style. Click the Paragraph Mode gadgro (to the right of the Null Pointer). Click ter NEW gadget that is below the tags list Into the text gadget that appears, type FOOTER and press the Return key. Now select Alter Current from the Type Stris menu. In the Font section at the top of ter

how it looks before and after setting up the FOOTER style

Ire Style requester, click the H gadget md then click the downward pointing $=\sim$ to the right of the alphabet. The -peface name Helvetica-Bold should eppear in the gadget above the alphabet. Zidx the 36 button to select the text size.
In the Spacing section, click in the wovere Line gadget, press Amiga- X and ben Return to set it to zero. Do the same wall the gadgets in this section, and in the tree gadgets to the right. Select the CEN$E E \mathrm{~g}$ gadget towards the foot of the eqpester, and then OK.
Click in the EVERYONE WELCOME zru on the page to highlight that text, then dirk on the FOOTER item in the tags list t set the text in the style we have just creand.

Click the Null Pointer gadget and then disk the grey area in the Screen Position padget so that you are now looking at the mp half of the page.

## VANISHED

Create a rectangular box whose top left position is $\mathrm{X}=0.25 \mathrm{in} \mathrm{Y}=0.5 \mathrm{in}$, and whose Sonom right position is $\mathrm{X}=\sin \mathrm{Y}=5.5 \mathrm{in}$. Once drawn, move this box so that its botzm edge is 4.75 in down from the top of the page. This means the top of the box will be pushed off the top of the page. Don't panic, that's what we want to happen.
Click on the T gadget, type in Street Party! and click the Null Pointer to finish. At this point you can't see the text on the Page. Don't worry about it.
Click the Paragraph Mode gadget and then NEW (below the tags list). Type HEADER into the text gadget, press Beturn and then select Alter Current from the Type Style menu. Change the Font to Bookman-Demiltalic, size 72, zero all the Spacing gadgets except for Below Line, into which you should enter -20. Click CEVTER and OK.

Now click in the Street Party! box on
the page and click HEADING in the tags list. You should now see the heading appear at the top of the page.
That text box is obscuring the top of the graphic below, so click on the Null Pointer and from the Box menu select Alter Active. In the Box Description requester that appears, click on the Transparency gadget (the right-hand of the upper two gadgets) so that it shows a grey box on a grey background.

## EXIT

Clear out the X -Axis Scale gadget (click in it and press Amiga-X), type 1.2 into it and press Return. Clear out the Y-Axis Scale gadget, type 4 and press Return. Click OK to exit the requester and apply the changes we have made.
Create a rectangular box at $X=$ $0.5 \mathrm{Y}=4.25$ top left, $\mathrm{X}=2 \mathrm{Y}=5$ bottom right, then click on the VENUE.TXT item in the tags list.

The text is set in the default BODY TEXT style. Select the Paragraph Mode gadget and then Alter Current from the Type Style menu. Change the Font to Helvetica, size 12 , change the First Line Indent to zero, then click OK .

Click the Null Pointer and create a rectangular box at $X=6 Y=5$ top left, $X=8 \mathrm{Y}=7$ bottom right. Click the $T$ gadget, type BRING A BOTTLE! and click the Null Pointer to finish.

Create a new style called BOTTLE in NewCenturySchlbk-Bold, size 24, centred, and apply this style to the text.

To get the three words on to separate lines, click the T gadget, click in the BOTTLE box on the page, move the cursor in the text gadget until it is just before the A, press Return; move the cursor to just after the A, press Return again. Click the Null Pointer to finish. All that remains it to

leaflet shout printer, your
print the document. From the Print Page sub-menu of the document menu, select Final. Make sure that in the text gadget under Output File Name is the word PSC: Click the PSC: gadget (top right of the requester) if necessary.
Change the Width to 8.2 in and the Height to 10.5 in . This normally results in a correctly positioned printout. If the top of your page is not printed in the correct
position, enter a smaller Height to move it down the page, a larger Height to move it up the page (don't ask me, it's just the way it works).

Density, dithering method, printer driver and so on are selected in the normal way via the Workbench printer preferences programs.


In the Box Description requester you can make a box transparent, give it a fill colour (Define Texture), plus motate and scale the contents of the box


The Publisher prints to dot matrix (Preferences) printers via the PublisherScript PostScript interpreter. To these ends you must print to PSC; not to PRT:. If you are using a Postscript printer you may print direct to PAR:, Print to DISK If you intend to take the PostScript to a bureau for printing
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Is WaveTools the sampler we've all been waiting for, or just another expensive add-on? Paul Austin auditions the latest in 16-bit sound

Ever since the arrival of $C D, 16$ bit has been the standard to which we've all aspired. Unfortunately, for the vast majority such high ambitions have remained well beyond the reach of the average bank balance.
Thankfully the financial tide is turning courtesy of WaveTools. Like most 16 -bit systems the hardware requires a Zorro slot which limits it to desktop machines such as the A2000, 3000 and 4000 running 68030 processors or above.
Assuming you have the necessary hardware, installation is a simple matter of slotting in the card. Adding the necessary 1/O phono connections is slightly unusual in that they're attached to a blanking plate which conseets to the card via a short cable.

## INSTALLATION

When the card, blanking plate and audio leads are in place it's time to add the software by simply dragging the icons onto your hard disk along with a single library file which is added automatically through an install icon.
Although a hard disk wasn't listed as an essential it's arguably the most important element of all. Like the SunRize 16/12-bit samplers, WaveTools is a direct-to-disk system, but unlike SunRize it appears far more
comfortable with slower drives, though it must be stressed that WaveTools as it stands is a far simpler system.
In short, the difference between the two is that while the SunRize boards are a combination of multi-track recording, mixing, and mastering WaveTools is essentially a mastering system with limited mixing abilities.
Like the Clarity 16 -bit sampler WaveTools opens on a Workbench screen with a small control panel handling an array of samples. Not surprisingly you can open as many windows às you want, cutting, pasting, copying and mixing between them as required.
Just like its innumerable 8 -bit counterparts you're given the ability to mark and play regions via the usual click and drag mouse manoeuvres, and you're free to initiate playback from any point. But of course before you can edit it's a good idea to have a sample on hand.

## RECORDING

Clicking on record initiates the process, though before you can import anything you have to define the file name or opt for the monitor screen which allows you to adjust the various 1/O signals thereby avoiding clipping problems during recording.
If all's well you can return to the main window, re-select record, and

then name your file, after which you're taken to a separate record screen to define the sample rate - right up to the maximum 48 kHz of DAT. Here again you can monitor the input strength and make any final adjustments via a small gain control.
Once you're happy, the last job is to define the length of the sample. An estimate of the required storage space is provided so you shouldn't suffer any unexpected storage problems, but considering one minute at CD quality stereo eats over 11 Mb of hard disk space that's perhaps a bit optimistic.

## PROBLEMS

As for sound quality there are no complaints whatsoever. In fact it ranks alongside any direct-to-disk system on the market. Alas good sound quality alone doesn't make a great sampler.

Although mentioned briefly, mixing is a real let-down. As you'd expect, the process allows two samples to be combined into a new super sample. Unfortunately mixing within WaveTools is at best a hit and miss affair.

The system can only play one stereo sample at a time, so there's no means of monitoring both samples in real time. As a result you're forced to adjust the levels of each via small graphic oscilloscopes which move in response to accompanying sliders.
The user is consequently forced into a bit of graphical guess work which more often than not is woefully inadequate. Worse still, it is impossible to monitor the volume changes prior to mixing, even on an individual basis. Fortunately an undo option is provided, but this requires yet another file on disk which of course eats up yet more valuable disk space.
With the aforementioned limitations it would appear there's little to recommend WaveTools. Thankfully however

Great sound guality, but I'm afraid the missing module does let the system down
an imminent update could turn the tide and allow the board's excellent sound quality to team up with much improved functionality.
As you peruse the glossy folds of $A C$, the finishing touches are being applied to an add-on card which will provide a DSP, SMPTE timecode and most important of all real time eighttrack recording and mixing. This new add-on, entitled the RTX module, will ship as a $£ 299.95$ upgrade which hopefully will address the shortfalls of the existing system.

As it stands it's fairly difficult to recommend WaveTools to any would-be investor. However, if and when the new RTX module arrives it may well be a totally different story.
If the promised module and WaveTools combo ship at present sug. gested price of $£ 499$ they could well take the Amiga music world by storm, but until they arrive I suggest you save up and look out for a follow-up review in a forthcoming issue.

## 4

SYSTEM ESSENTIALS
RED $=$ Essential $\quad$ YELLOW $=$ Recommendel


The bottom line Product: WaveTools Supplier: Blittersoft Phone: 0908220196 Price: $£ 349.95$
Implementation 6 Ease of use 10 Value for money 5 Overall 6


# Commodore? 



Many of us are waiting with baited breath for news of Commodore's future, but there sure is a whole lot of hot air being passed around in Amiga magazines about how CD32 is going to pull Commodore's bottom line out of the red and into the black.

And if you believe that I would suggest that you are a prime candidate for a sci-fi RPG-induced psychosis, because that's what those deus-ex-machine stories are: science fiction.
Remember CDTV? Nuff said.
It really galls me to see you reporters trying to convince us that Commodore is "restructuring" and "streamlining" and in an excellent position to take on the competition. That's like saying the Titanic was restructuring its flotation potential to challenge the competition for seafaring space.
I hate it when you say Commodore suffered losses due to the fluctuation of the international dollar value and the belttightening state of the world economy. That's the same kind of hype we accuse PC and Mac magazines of when they fail to report the Amiga's prowess.

Why can't you admit that Commodore suffered losses because Commodore's comatose leadership makes Moe, Larry, and Curly look like Mensa members? Why can't you just come out and say that Commodore's in deep trouble because the company's strategic planning is as intelli-
gent and foresighted as Laurel and Hardy's attempt to move a piano? And why can't you tell us that Commodore's upper management are jumping out quicker than popping corn with no lid? Is it fear?

You know, for the last several years you have been urging us to hype the Amiga to our friends, to show its power to potential new users. In short, to do Commodore's marketing for them, and all in the name of loyalty to our favourite computer.

And we did.
Our user groups got involved in mall shows, multimedia expos, cable TV infomercials, and a variety of other activities designed to promote the Amiga. As individuals, we became Amiga evangelists singing the praises of the miraculous machine to anyone who would listen (and many who wouldn't).

Now, we would like to challenge you. It's time for you to do your part to help the Amiga survive. We're asking you to start reporting the truth, the whole truth, and nothing but the truth. Maintain your integrity as journalists and expose Commodore to some light. Use your journalistic talents to ferret out some real news instead of the hyper-hype we've been getting lately.

And when the truth comes to light, use the power of the press and call for the resignation of the current short-sighted, greed-addicted, self-destructive leaders of the company. Use your media influence to demand an end to this reign of stupidity at Commodore.

We've done our part. We bought stock. We voted. We marketed. Now how about doing your part? You've got the power.

Ciao for now.
Frank G Salvatini, Metropolitan Amiga Enthusiasts, Roselle, Illinois

There's no doubt that the efforts of enthusiasts and user groups have been invaluable to the promotion of the Amiga, but we too have been doing our part for five years, and if Commodore had listened to us there would have been, among other things, a model between the A1200 and A4000 with a faster processor and better expandability, the A1200 would have been released with a hard drive as standard instead of the stop-gap arrangement that Commodore managed months after the launch, and marketing would have concentrated on non-games areas.

In the past, Commodore have come under fire from most UK Amiga magazines, and we have crilicised them for concentrating too much on games, failing to properly develop and market the Amiga's productivity talents, and leaving more or less all peripheral development to third parties.

In addition, we have expressed the belief that Amiga technology should be licensed to third parties in much the same way as IBM allowed clones to be built so that an aggressive Amiga market with cheaper Amigas and more models might develop. This finally happened in part recently when Commodore farmed out the development on the A4091 card.

However, we have also praised the release of the AGA machines as a step forward, CD32 as a solid attempt to win back bread and butter sales from the consoles, and the success of the Amiga in the multimedia and video industries.

Of course, most of the latter is down to the Amiga (courtesy of Scala and the Toaster) selling itself, but at least some sort of recognition

## Buy direct

You discussed in your November issue the costs of buying goods from the USA, so you may like to know that there is a useful little book published on all the tricks necessary to purchase goods by mail order from the US.

The telephone call is often toll free, even from Europe, and you can use cheap rate after 8pm. Your comment on import duties is correct for hardware but at the moment software is duty free.

Carriage and insurance costs are around $\$ 5$ per pound in weight and there are a number of stateside customer protection agencies in the event of anything going wrong. payment can usually be made by credit card.

The biggest obstacle to buying from overseas is the lack of information in magazines on what is available and at what cost. Is it not possible for magazines tike yours to take advertising from US mail order companies?

The book to which I refer is called Buying Direct from the

USA by Richard McBrien and can be bought from Running Heads International, Grove House, 82 East Dulwich Grove, London SE22 8 TW.

A Baker, Fowey
Thanks for the information, which some of our more adventurous bargain seeking readers will no doubt find useful. We could take advertising from US mail order companies, but the truth is that the response to such adverts would most Hikely be much less than an advert in a US magazine and the mail order companies will place their ads where they will reap the best harvest.

We can't close the door on such a suggestion, and as the Amiga is stronger in Europe than in the US we may see some American mail order companies taking the plunge, but don't expect to see it for a while.
of these markets has filtered through to Commodore's top brass.

What cannot be stomached is the fact that although gifted with the most successful 16 -bit home computer of the 80 s, massive sales of 14 million C64s and three million Amigas, Commodore still find themselos in 1994 back in the same position they were in 1987. Whether this can be attributed mostly to Commodore or the fierce competition depends on who you talk to, but look at the facts.

Since the original Amiga was launched with revolutionary teclunology, it has lost its tecimical lead and seen only one major development (AGA), yet the Macintosh, PC and, to a lesser extent, the consoles have come on in leaps and bounds.

From a position where the A1000 tous competing with mostly green-screen PCs angmented by crass EGA graphics, the PC has adounced to a position where it enjoys fast 32 bit processors, cheap 16 -bit video cands, and a foothold in markets well outside its original office stalking grounds.

The three years in which the A500 rulet the games playing world and sold itself without any help from Commodore seems to have produced an inertia and complacency from which the company have only recently roused themselves.

It is worrying that we are staking so mach on the success of only two machines - CD32 and the A1200 - but this is more rasson to talk the machine up than down.

We at AC have never taken a blindly optmistic or poodle-like approach to Commedore and we won't start now, but as consumer journalists it is not our job to stick the krife into a troubled company which still employs many a family's bread-winner. We are here to report and comment on market developments, test new equipment, and offer buying advice to our readers.

If this means crificising Commodore for mistakes in strategy or planning, we will do so, but don't expect any witch-hunts. Remember that in Salem, Massachusetts, the victims were mostly the innocent.

## Poetic angst

Here's something a bit different for you to print, a poem by my wite Ruth Le-Vallois about me and my similarly Amiga-besotted friend Joe Sokolov. It's called Amiga Amigos.

Maurice has got an Amiga His Amiga is his amigo
And he has an Amiga amigo
His amigo's name is Joe
This Amiga amigo Joe
Has an Amiga too
But poor Ruth hasn't got one And she is feeling blue

Mo phones Joe then Joe phones Mo And they call each other back Ruth can't get a word in It's an Amiga that she lacks

They visit to talk Amiga talk About a virus, games and disks They discuss their floppy things And games where they take risks

Now what if Ruth slipped a disk And lost her arm Or if she caught a virus<br>Would that interest Amiga man?<br>\section*{Would one half of the amigos}<br>Want to speak to his wife then? Only if it's Amiga talk<br>Would Mo show interest again<br>Ruth wants to be Mo's amigo<br>Please Maurice be her chum Cos if you don't she'll stick Yer Amiga up yer bum!

Maurice and Ruth Le-Vallois, Paisley
It's nice to see that poetry is still alive and well in Paisley, even if St Mirren's hopes of playing some decent football aren't. Where are you now Alex Ferguson?

As the poem is in a ballad form, why not put it to music? It would fit any traditional folk ballad, even Greensleeves, and you never know when a number one hit might be around the corner. If the smurfs can reach number one, so can the Amiga Amigos.

## Young Maxwell

I like making newspapers. I've got an A500 Plus and I would like to know if there are any programs I could make newspapers with.

I'll just explain to you what I'm looking for. I would like the program so I could move pictures and articles around. I would also like to know how I could put photos onto the screen so I could print them onto paper. Please could you answer my question?

Colin Barrett (aged ten), Thetford
You have a spiralling ambition for one so young, but there's no reason why you

## Crass crossheads

I have been reading your magazine for three years now, and I've finally had enough of your headings in the letters pages and elsewhere. If I see another variation on "printer problems", "mighty monitor", or any of the usual alliterative nonsense, I shall scream.

Alliteration is an old and wonderful tradition in English verse, but if Chaucer had known it would one day be used so widely and with such apparent lack of thought he would have jacked it in and become a stonemason.

Can you please put a stop to it?
Paul English, Stratford
I am pleased that you have perused our paltry pages so painstak-
ingly that you should detect the deluge of distinctly dodgy designatory headings.

We try to keep the crossheads catchy and stuff our subheads with spice, otherwise our verbage might very well tumble into total tedium.

It is meet, though, that this missive should mull over our meanderings and we shall endeavour in future to restrict such risible rantings and render them rare.

Oh, and as far as I remember it was Wyatt rather than Chaucer who revived the alliterative tradition, though I've been wrong in the past, like when I bought Commodore shares... (that's enough pointed satire - Ed).
shouldn't be able to create newsletters or newspapers on your A500 Plus. The best program for you would be PageSetter 2 or 3, and I'd advise you to drop heavy hints to your parents about adding a bit more memory to your Amiga.

Affer all, it's money well spent. If you can learn the rudiments of layout and page design at the tender age of ten, you could be the next press baron. Just don't go the way of Cap'n Bob, eh?

## Future plans

I have spent the past few months pondering over an increasingly complicated dilemma. I am very much into desktop video and especially 3D animation. At present I have an A4000/030 with 120 Mb hard drive and 6 Mb RAM with a 25 MHz FPU.
I have made the investment of buying a copy of Real 3D v2, setting me back by the whopping sum of $£ 340$, and I would recommend the program to anyone, even a beginner, for as long as they possess a great deal of time and patience its power will eventually reap great rewards.

There are, however, a number of things I would like to buy. I feel restricted by the AGA chip set and am looking to buy a 24 -bit graphics board. The OpalVision board seems very good, especially with the forthcoming add-ons. I saw that Indie were advertising it for under $£ 350$ and I'm mightily tempted.

However, with the advent of EGSbased retargetable graphics boards I wonder whether or not I should wait for a suitable board with these features? I need a fast and powerful paint program for the board which supports the Genius digitising tablet I'll be buying soon, and realistic simulation of drawing materials with sensitivity controls is a must.
With the AAA chip set on the horizon, the need for a 24 -bit board at all is called into question. Do you think it will be wasted cash or that the next range of Amigas will be so highly priced that changing to them will be much more expensive than buying a graphics board?

1 also need a modem to contact the Activa BBS, and another 4 Mb SIMM. My current budget is $£ 600$ but has the potential to expand greatly over the coming years. Bearing in mind that I want to work to professional standards, what
advice can you give me?
Quentin Brown, Chichester
The AAA chip set will most probably not appear in a new Amiga until the autumn, so why wait? You have a specific requirement which is unlikely to change, so it is best to buy the equipment to do that job now and stop worrying about future developments.

Your mactine, the A4000, is the best DTV workstation available for less than $£ 3,000$, and with the addition of a suitable video card it should be capable of superb professional results, but note the use of the term "video card" as opposed to "graphics card".

Most of the RTG cards available are purely display cards with little or no video friendliness, though a couple now have video encoders. The OpalVision system is a much better choice for DTV, but I would advise you to wait until the video add-on pack is available and has been reviewed. We have heard many promises from Centaur, but nothing has come of them yet.

You will have problems with your choice of tablet. The Genius is a good low cost unit but is not used much by commercial artists and is therefore under-supported. A better (and much more expensive) choice would be the Wacom tablet from Silica Systems which is supported by TV Paint.

Modems are easy. Go for the Sportster or one of the Supra 042 bis models as they are reasonably priced and pretty quick. Downloading large Jpeg or object files can take some time with a slower modem.

## Shuttle fix

Having just upgraded to an A4000/030 with 120 Mb hard drive and 4 Mb RAM I was just a little annoyed that Shuttle wouldn't run or work. Anyway, I have managed to get it up and running on my hard drive, and for anyone else who's having problems, here's how I did it.

First, boot from hard drive then use the

HDInstall program on the Shuttle disk. Once it's installed you need a copy of degrader (given away on an AC CoverDisk), which you should copy complete with icon into the Shuttle drawer.

Once this is all done, boot from the HD, open degrader, select NoFastMem, Privelige errors, nocache, noburst, and switch all the drives except df0; over to df 4 : then reboot and click on the Shuttle icon, which should then work as if it's on an A500.

Iain Lippitt, Shrewsbury
Thanks for sharing your exhaustive research with the rest of us, Iain, but I can't help wondering why people bother. If the game works as if it was on an A500, the extra power of the A4000/030 is wasted. Nice one, Virgin.

## min momp CIIB may up in corner Sunderland, <br> where Newcastle Brown Ale takes preference to spritzers and football is best not mentioned in polite conversation. The group has a disk magazine called Blitter, and is striving to offer help on such varied topics as video, DTP, programming, and graphics. <br> If you want to know more about this group, send a stamped addressed envelope and a blank disk to: <br> P Kruman <br> 213 Fordfield Road <br> Sunderland <br> SR4 OHF <br> In return, you'll receive a copy of the disk magazine, information about the club, and a list of AGA-specific PD.

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## BUSINESS HOURS

TECHNICAL HELP

## Which method?

gI am a graphics artist who has Just cottoned on to the Amiga as a cheap source of ansellent graphics software, and I'm anticularly interested in ray tracing, E.Ech l've never made use of before.
tly problem is that most Amigas, twen the A4000/040, seem fairly slow esmpared to the machines used in my industry, and I need to produce sraphics quickly. What is my best Ber?

Is there a particular package which you can recommend as faster than the others or are there short-cuts? Can I add more power than the ssou40? If these questions can't be answered I may have to forego the superb cheap software, so please sive it a try.

Gareth Mayhew, Dudley

AIn your industry, you are probably used to using £70,000 worth of Silicon Graphics machines running at 150 million instructions per second (Mips) and upwards of 20 million floating point operations per second (ttflops). The 68040 runs at about 17 Mips and 2.5 Mflops, so it's no wonder you're concerned about speed.

Basically, there are two options. You can opt for Lightwave 3.0, which will cost $\$ 2,000$ when bought with a Video Toaster, or think about a rendering board.

Lightwave is an NTSC package which requires tweaking to produce PAL video-sized images and as it is bundled with the Video Toaster it is much more expensive, but it is a lot faster than most other Amiga packages.

A new dongle, called LightRave, will enable the use of Lightwave on a machine without the Toaster, but you still have to buy the software from NewTek and at the moment it isn't ctear if software upgrades will be sold to Europe as NewTek are a little miffed with LightRave. Check out the LightRave review two issues back for details.

Rendering cards based on ultrafast parallel processors are being developed, and we hope to review a working transputer card some time in the next three months, but the Screamer card for Video Toaster users, and others based on the T1340x0 family are still dreamware.

With a parallel processing card, the Amiga should be able to work at 200 Mips (using a single T9000 chip) and above, but software has to be recompiled to make use of these boards.

Keep an eye on future issues for more information, as this is an exciting new area we will be watching with interest.

> Lightning never strikes twice... unless it's in the Amiga's premier technical letters page, that is


## US import

$\sigma$My father is going to the United States soon and I was wondering if I could get an A1200 from there as the price is lower. Problem is, I don't want to spend over $£ 200$ and find that it does not work here in Britain, so can you please help me?

I read the letter "Brazil Nut" in issue 67 and found out that disks can be wiped out by X-Ray machines, so how can I bypass this if I am buying a complete unopened pack and would need an adaptor?

I would also like to know why you do not reply personally to letters even if you receive a stamped addressed envelope. Is it a ploy to make the writer of the letter buy the magazine to read the reply?

Sharad Bhardwaj, Nuneaton

AThe A1200 itself doesn't care whether it's in the US or the UK, but a different power supply is required for the UK. You can get one from CPC Ltd on 0772654455.

Remember that if you refurn to the UK, the A1200 will be subject to 4.9 per cent import duty and 17.5 per cent VAT, a calculation which you should make before deciding whether you'll save money. In the end, you may find that you spend as much as you would in Britain.

On the other hand, software is duty free, so you could make a killing by buying some US software while you're over there. The only problem you may find is that most software is supplied in two versions, one for NTSC, one for PAL, but it might be possible to lay your hands on the PAL version if you ask the salesperson.

Airport X-ray machines have no harmful effects on floppy disks, CDs, audio tapes, or exposed film, so there's nothing to worry
about on that score. Even if they did, wouldn't it be a good idea just to open the A1200 box and take the disks out? Just a thought.

Finally, we don't accept SAEs because if we replied to every letter personally there would be no time to write the magazine. Besides, a question answered in the ACAS pages is a problem shared with thousands of readers, whereas a personal reply would benefit only one person.

## Cracked tube



My monitor, a 14 in Goldstar model taken from a secondhand PC (the casing of which now serves as a wonderful foot stool) has
started to develop a nasty black line in the middle of the screen. The line appears after about ten minutes of use and gradually spreads from a single pixel in width to about three millimetres or so.

I've tried the various controls on the front of the monitor without success and now fear I may have to buy a 1942 or something. Is there anything I can do? Strangely enough, after some warm reboots the line goes thin again, while at other times it stays the same size.

Peter Walker, Kempston

AThat's a weird one, isn't it? If there was a problem with your monitor's tube, you would expect the screen to bow or bend, or for the colours to bleed, but lines which gradually widen are something l've not come across before.

If there's onty one solid black line it is prosably caused by a problem with the signal to the guns in the CRT which makes them skip that part of the screen. This is a modestly optimistic sign because it might mean you won'? have to have the whole tube assembly replaced.

Try the Amiga with a TV and if the problem doesn't repeat itself you should have the monitor looked at by a repair company. With any luck there will be a cheap answer to the problem, and at any rate it should cost less than a new 1942.

## Lightning strike



Regarding the hard drive failure of A Luszjar of Birmingham in your Christmas issue, I would like to advise him and all your readers that lightning can play extreme havoc with a computer and with all sensitive electronic equipment such as TV sets, modems, short wave radios, and so on.

A direct strike or even a near hit can send surges of current on the power mains, phone lines, cable TV, or any outside aerials of a magnitude that cannot be suppressed by any known surge protec-

## Overscan blues

$\sigma$I am the not-so-proud owner of a new 1942 monitor which I use with my A1200, and even with the patch to cure the overscan problem I find that many programs still run askew.
Several open screens which are an inch or more from the centre of the monitor screen, and this often stops me from getting to some icons and buttons.

What's the problem? I've tried fiddling with overscan till the cows come home and all that happens is that the screen jumps from one side to the other depending on the program l'm using.

Sally Wilson, Dundee

1Are you sure you set the original overscan settings properly? Go back to the beginning and make sure you have copied the new monitor drivers to your Devs:Monitors drawer, then set overscan again, being careful that text and graphics overscan are set to the same values.

If some programs still won't behave, you may be using software which isn't happy with AGA screens, a problem which is especially acute when you use Productivity mode.

Try holding down both mouse buttons at boot-up and selecting the Enhanced Chip Set option before using one of the troublesome packages, and if this works you will have found the problem.

Otherwise, you may have to change your screen mode to hi-res no flicker, which is a better approximation of PAL hi-res interlace than Productivity and should always be used if you have mode promotion tumed on.

## Camera obscura



I have a project in mind which involves my class of sixth formers in multimedia of a sort in that I want them to use our computers to put together a presentation on the benefits of the local area. This will mean using whatever pictures we can and scanning them in using a colour hand scanner.

My problem is that the best photos I have are all on colour transparency and I have yet to devise a way to scan these in using the hand scanner. Any ideas?

George Parsons, Peterborough

A
Scanning transparencies using a hand scanner will never produce good results but can be made to produce at least something.

First of all, as transparencies are, well, transparent, you can't rely on the scanning head's light source. This will pass through the trannie and reflect back to the scanner causing a refraction pattern on the finished scan.

To keep this unavoidable problem to a minimum, take the tranny from its plastic holder and keep it as flat as possible on the scanning surface, then try a variety of shiny and matt surfaces on which to lie it.

Using a second bright light shining at 45 degrees from in front of the scanner head sometimes helps, but the only way to scan trannies without paying for an expensive GT6500 with transparency unit is to experiment, and even then you won't get great results.
tors. Many a computer has been burned out, all chips fried, circuit boards charred, and the like.

Lightning surges can jump over on/off switches, and a telephone line surge can go through a modem into the computer wiping out all in its path. Therefore, even turning off the computer during a lightning storm will not guarantee its protection.

You must unplug from the mains and the phone line and any other wiring coming into the house. This must be done at


> You got problems too? Then drop a line to Amiga Computing Advice Service, Europa House, Adlington Park, Macclesfield SK10 4NP and we'll move heaven and earth to help in these columns. But sorry, we cannot reply personally, so save those SAEs.
the first sign of distant thunder, and preferably before when there is advanced warning from the weather bureau.

You should also avoid using the telephone during a storm as a strike can be fatal. I always unplug my computer from the mains and the phone line when I will be away for more than a day and it is considered good practice for all to follow this procedure.

I have a Masters degree in Electronic Engineering and have done extensive research into lightning dangers. Mr Luszjar, far from being unlucky, is lucky that his whole computer was not frizzled and that he himself was not personally injured.
It is not wise or safe for you to advise your readers that it's OK to operate computers with lightning around.

Stu Casper, Taylorsville, North Carolina


We stand corrected, and if research on lightning has produced statistics or evidence showing how computers are affected, we would be grateful if you could send it to us so we can let the rest of the readers know.

1 suppose it's fortunate for people in the UK that we generally don't see electric storms of great ferocity and that lightning injuries are rare, a fact which can perhaps lead to a little complacency.

## Which files?

I have just moved from the ST to the A1200 and I'm feeling a little at sea. my problems begin when I try to copy programs over from one disk to another (especially CoverDisks) as I'm never sure which files need to be transferred or where to find them (not a problem on the ST).

Have you any general tips on how to set about copying programs from one place to another and installing them onto hard disk? How about a long article on the subject or has that been done in a previous issue?

## Peter Bardon, Bradford

AWe've had a few series for beginners on the general makeup of an AmigaDOS floppy disk, and this should have given most who followed them a few pointers, but we've never written an article on this specific subject.

You'll find a couple of hints on the Getting Started page printed every month with our CoverDisk instructions but there's one simple tip that can save much hassle.

Get yourself a copy of SnoopDos or a similar program which is designed to keep track of most AmigaDOS operations and report their progress. In other words, such a program can often tell you which libraries a program is

## Power cirain

I have been assured by a friend of mine that it is better for the Amiga to be left on at all times rather than being tumed off and on every time it's used. Apparently, the latter not only uses more electricity but can shorten the machine's life-span. Is this true?

I mean, wouldn't you expect the environment to suffer if millions of micros were left turned on every night or all day long?

Carl Tranter, Biggin Hill


As far as the Amiga motherboard is concemed, it would rather be left on all the time or off all the time, because the very short period during which the circuit is powering up is the
most stressful time of its life (save lightning strikes, of course Ed).

You'd have to ask a physicist how much electricity this uses in kilowatthours, but l'd be very surprised if leaving the Amiga on all night actually saved you electricity.

Many large office blocks do leave their strip lights on at night these days to avoid the necessity of switching them on and off because in this situation it is economical, but forget it for the Amiga.

A lightbulb might be able to burn for a period of time on the electricity it takes to switch one on, but I wouldn't bet on the Amiga reacting similarly.

## Bonus format

9I only recently upgraded to Workbench 2.04 by fitting a ROM chip and buying some Workbench disks, and the improvement over my old WB1.3 system is fantastic.

Only one thing mystifies me now, and that's a comment I read in another magazine concerning Fast File System. The article claimed that you could get more onto a disk if you used FFS but failed to say how. I'm reluctant to buy a whole book just to learn this trick, so can you help?
James Fitzgerald, Loughborough

A
Fast File System will give you about 40k more storage space on a disk if you just use the proper parameter when formatting a disk. Instead of the usual command, type:
format drive ofo: maxe Enpty ffs
Just make sure you don't try to use the disk on a 1.3 machine, as it won't be recognised.
opening when it runs and which of these it can't find. Once you discover the culprit missing files it is easy to correct the fault.

SnoopDos is a shareware program which has appeared on past AC CoverDisks and can be found in most decent PD libraries.

## Ascii horror

 When is Ascii not Ascii? When it goes from one word processor to another, that's when!
I have recently swapped from using Final Copy II to Wordworth 2 because I have need of the latter's better document processing, and the job of porting my documents from one to the other has become a nightmare.

So-called Ascii text appears with strange formatting where the paragraphs don't have line feeds, and I have to go through the whole chapter putting the carriage returns back in. Please say there is something I can do about it before I go insane.

> Frustrated, Edinburgh

AThe answer is to use the Wordworth load format requester and choose Ascii, then click on the two options labelled With CR/LFs (PC Style) and As Many Paragraphs. So long as the Final Copy II document was saved using the Ascii export Wordworth should open the document perfectly, though you will then have to change the page width from 28 inches to about eight inches.

Most packages have their own particular idea how Ascii text should be saved out, and a supposedly standard file format can have carriage returns or line feeds or blank lines almost anywhere and in any combination.

Fortunately you have a copy of the most flexible word processor in this respect and your problems should be over.



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## PICASSO II

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The Picasso II RTG Emulator integrates seamlessly into the Amiga operating system to give the most reliable emulation available. The new resolutions provided by the Picasso Il appear in all your applications as new screen modes selectable from the standard ScreenMode requester. For any program that allows you to choose a new screen mode, you would simply choose a Picasso II screen mode as an alternative (such as Picasso:1280 $\times$ 1024). You will not have to wait for any custom programmed versions of any program that is compliant with the rules of the operating software. Such programs will be able to immediately take advantage of the Picasso Il board. Programs that are written with AGA in mind will be able to immediately take advantage of the new modes available to


The Picasso II is designed to take full advantage of the host computer system. The built in Blitter and high speed memory subsystem mean that you will have super fast screen updates. Switching between Picasso II mode screens is very fast and switching between Picasso II mode screens and native Amiga screens is nearly instantaneous (as fast as your monitor can re-sync). Because the Picasso II RTG board does not use Chip RAM, your Amiga will be less likely to suffer from bus contention problems normally associated with running high resolution screens and heavy DMA activity.
The Picasso II RTG emulator has been designed so that it uses no Chip RAM. All available screen modes on the Picasso II use only Fast RAM. This sophisticated design means that even a 1 Mb Picasso II board can support as many high resolution 256 colour screens as will fit in the Fast RAM of your system.
The Picasso II comes with several screen modes and resolutions that are industry standard and for which all monitors are designed. These modes operate at the proper scan rates and frequencies in order to take advantage of the most popular monitors available. In some instances, where those modes may not be sufficient, there is a program that will allow you to create your own custom screen modes. You will be able to create screen modes that exactly match your monitors frequencies and resolution capabilities.Picasso II comes with Personal Paint Lite, MainActor (animation program), IFF, GIF, JPEG and MPEG Viewers and drivers for ADPro, ImageFX, ImageMaster and Real3D. Other bundles are available too.

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WaveTools hardware and soltware gives your Amiga the punchy sound quality of CD's and DAT recorders at a fraction of the price of other 16 bit sound cards. WaveTools uses your computers hard disk drive to directly record, edit, mix and playback audio with the clarity and crispness that only 16 bit technology can provide, in Amiga compatible AIFF 16 stereo file format. Using state of the art circuitry and the latest in 64 X oversampled Sigma-Delta conversion technology. WaveTools has a frequency response of 10 Hz to 20 KHz and a dynamic range of 85 dB for faithful reproduction of sounds from the fattest bass to the thinnest strings. WaveTools provides a pair of stereo I/O jacks for direct connection to any device with standard line in and line out connectors. Record from CD players, DAT recorders. Video Tape, Videodisk or any other line level audio sources. Add voice-overs or other sound effects to produce crystal clear audio tracks for productions demanding uncompromised sound quality.

WaveTools feature set meets the needs of the most demanding users Multiple waveform windows may be opened simultaneously and you can be cut and paste audio open files to tacilitate building complex audio tracks. In addition to cut and paste WaveTools supports digital mixing of unlimited numbers of tracks. Using WaveTools mixer, you can layer sound upon sound to produce rich, full audio tracks that have the quality of studio made multitrack recordings. Using WaveTools extensive editing and mixing functions, you can sweeten your basic tracks with overdubs.

perform $A D R$, and place sound effects at specified points in the sounctrack. Best of all, since WaveTools is processing audio in the diglal domain, there is no generational loss or noise increase normally associated with outdated analogue mixers and recorders. WaveTools is able $1=$ sample data at a variety of sampling rates as low as 19 KHz as well as ter standard rates of 44.1 KHz and 48 KHz for CD and DAT compationity WaveToois includes a waveform editor for cut, copy, paste and mix operrtions on selected portions of audio waveforms. Edits can be taggod as destructive or non-destructive. WaveToots also maintains an internal tina code in the format of SMPTE 24,25 and 30 trames per second to ensorn perfect synchronisation of your audio files with video and animation : required.

The WAVETOOLS RTX (Real Time Effects) Module adds an AD2105 DSF (Digital Signal Processor) and a SMPTE time code reader/generator. The DSP allows real time 8 track mixing and playback (stereo out), and ner time effects such as flange, echo, slapback, EQ etc. The architecture as open to allow third party developer support (custom DSP routines). Te SMPIE time code reader allows WaveTools to chase Longitudinal Tim Code (LTC). Vertical interval Time Code (VITC) and Midi Time Cose (MTC). It accepts composite NTSC or PAL video for VITC and line lest audio for LTC. The time code generator can stripe VITC or LTC and can generate a user positioned time code burn-in window for making a vior work print with time code stamped on it.
WAVETOOLS
E3es 5
RTX Module (Ships January)
WAVETOOLS RTX (both boards)
ocal area networks (LANs) have been one of the most important developments in the computer uerd over the last decade, yet the Amiga tas been less than well served by network"speripherals and standards.
While PCs and Macs joined hands theugh Novel AppleTalk and others, the turiga saw only a couple of attempts at netwarking, none of which caught on.

The fact that few commercial organisaairs have in the past used large numbers of Amigas on a single site has been a major ase of the lack of interest in LANs, but as so-called "Toaster farms" become more mevalent in the US broadcasting industry and Amigas begin to be used in numbers for ather work, networking became more popular.

In general terms, most networks consist if a host machine (or server), normally a powerful beast with a huge hard drive, and a number of slave machines which communicate with each other via the host, which tandles all traffic.

In so-called "peer-to-peer" networking, ach machine on the network has its own bost software and can communicate directly with others connected to the network.

The single aim of any network is commurication, regardless of the way the network as organised, and this is most often in the form of data being passed to machines which wouldn't normally have access to it.
Small machines with small hard drives an access larger storage devices on other setworked Amigas, and efficiency goes trough the roof.

## MODERN

Unfortunately, the intensely jargon-domisated world of networks has spawned a tower of Babel as far as standards is conarmed, and it wasn't until recently that the Sandard Amiga Network Architecture ver$\sin$ II (SANA-II) was settled upon that the Amiga could boast a modern network standard.

SANA-II (which sounds too much like an old Abba song for my liking), was develaped by Commodore and is a set of rules for networking software which, if adhered to, should mean all compliant packages will communicate with all others. The hoped-for nsult is that developers can feel free to write new software without worrying about compatibility.

1-Card consists of a PCMCIA card, a network connector, a floppy disk, and a small power supply. We had to find a British
equivalent of the American PSUs supplied with our test units, but a UK supply pack should hopefully be included in future and is only needed in the case of networks using Thinnet connectors.

The inputs on the network box allow for the connection of both 10BaseT (Twisted Pair) or 10 Base 2 (Thinnet) networks, both of which have their advantages. The former works on a star principle in that the host machine is the hub of a star of cabling going out to the various active machines and is limited to a radius of 100 m .
Larger and more flexible networks can be built using Thinnet 10Base2 cabling which requires fewer devices and can transmit across cables of 190 m in length.
A drawback is that fewer devices can be attached, but as both popular types of network are supported, the user should find, I-Card compatible with most existing Ethernet systems.
Installation is a simple matter of plugging the card into the A1200 or A600 PCMCIA slot

and installing the SANA-II driver. No networking software is supplied, so users will have to have access to one of the few available Amiga packages such as ENLAN-DFS or Envoy.
The TCP/IP package used mostly by high level Unix networks is also supported, so those using the A3000T for complex multimedia work can now hook the smaller Amigas into the system for use as terminals and workstations.

Only one major drawback remains with the approach taken by I-card. Using the comparatively slow 16-bit PCMCIA slot rather than a Zorro slot means that I-Card has to work hard to keep transmission

## Ethernet on a PCMCIA card? Stevie Kennedy casts his net over I-Card, the first AI 200 LAN system.

speeds up to scratch. It does this well, though, and claims to reach a very respectable 300 kbaud data transfer, faster than the Mac LocalTalk's 230 kb aud.

Though not a peripheral which will find a huge market, the I-Card is a clean, neat solution to the problem of connecting nonZorro equipped Amigas to the outside world, and should see a few A1200s taking

## Jargon buster

TCP/IP Stands for Transmission Control Protocol/Internet Protocol, an inter-network communication standard developed in the US and used mainly by Unix networks. This is the most common standard for large research and educational establishments.

Thinnet Sometimes called "cheapernet", this type of cabling scheme uses BNC connectors with cheap cables using single layers of shielding

Thicknet A double shielded, thicker cabling system using N -type connectors
twisted pair cable Used in 10BaseT networks, this is a cheap form of cable, most commonly telephone cable with jack socket connectors

Local area network, a localised system working on a single site with all machines situated close to each other

A computer or workstation which provides services to the other machines on the network, such as optical storage devices, tape streamers, or laser printers. Servers are normally referred to by the type of service they provide, hence file servers, print servers, and mail servers.
their places in networks around the industry. For users of existing Ethernet systems, adding a cheap AGA Amiga is now a possibility rather than a preposterous proposal.


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## Scala MM300

When most people think about multimedia presentations and video titling on the Amiga, the first name that springs to mind is usually Scala. Scala has been around for a while now (since 1989 to be precise) but Scala MM300 brings the product line bang up-to-date with new features galore.
Basically it appears that Scala (I much preferred it when the company was called Digital Visions, and the product was called Scala - it was a lot less confusing!) have studied MediaPoint (see next review) and added the new features into MM300 that were lacking in MM2xx, but present in MediaPoint.
Scala MM300 comes in a swish brown folder-box containing a 300 -odd page manual which is mostly a manual for MM210 with an addendum for MM300. The program itself is spread over nine disks and there's a little green thing in the box as well.
Oh, it's the dongle. A dongle is a hardware key that plugs into either mouse port on your Amiga; without it you won't be able to run Scala at all.

Time to install the software. Ah good! A company using Installer properly, that's what I like to see.

## OVERSCAN

A particularly nice feature is the fact that Scala asks you with what degree of overscan you would like the backgrounds installed. You can have None $(640 \times 512)$ Standard $(704 \times 566)$ and Maximum ( $736 \times 566$ ). Scala Multimedia 300 (to give its full name) requires a minimum of 1 Mb chip RAM, 2 Mb of fast RAM, Kickstart 2 and a hard drive, but of course they recommend 2 Mb of chip, 4 Mb of fast, an accelerator and Kickstart 3 as a minimum for optimum performance.
The tutorials offer a gentle introduction to the world of Scala, and for the most part, a good one. However, there is still this nagging feeling that you are just doing things by rote, and when one of the scripts doesn't actually work properly (the Guess a Number script


The classic Scala front in action


Wipes, wipes everywhere but not a drop to drink
which uses variables that aren't explained in the manual) you have no way of working out how to fix what has gone wrong.

Most people who have used an Amiga for presentation, video or graphics work will have come across Scala in one of its guises, but for those who have never seen it before, here is a quick run-down.

Scala brings together pictures, brushes, fonts and text with sounds, animations, variables and buttons. It has a wide range of backdrops, fonts and
ready-made clip art to get you going.
It can be used for stringing animations together to make a longer "film"; video titling and subtitling, Point of Information systems and Point of Sale systems.

It can be used as an interactive tutor, a videotext-type system, a "scoreboard" for live outside broadcast use, and many other things.

Scala has at its main menu a list of the pages you have in your script. Next to the items on the list are various attributes affecting those items like the
pause length, or what transition to use between pages

The items on the list are usually pages of graphics but can sometimes be animations, sound samples or music. If you click once on an item then click the edit button, you can edit the page, the way the animation plays or how the music fades, for example.

There are a couple of changes to the page editor in MM300. There is no longer a Move button; you just grab the thing you want to move and move it around! There is also now an Out effect


Ben Vost referees the ulsimate clash of the Amiga Multimedia heayy"veighte in an exhaustive, six-page head-ro-head

Can MediaPoint, the young pretender in the Amiga professional presentation scene, upstage the tried, trusted and respected Scala? Or will the recent updates Scala has seen, resulting in Scala MM300, be
enough to see off the Dutch upstart? Over the next six pages, all of the major aspects of these two packages will be tried, tested and judged. After the ultimate Amiga presentation system but not sure which one to go for? Read on...
button so you can not only bring text onto the page, but also wipe it out afterwards. When using the list in the page editor you will see that there are now two columns for the effects - one in, one out.

For users of other graphics cards like Retina, OpalVision or Picasso, it would be nice to see their features incorporated into Scala. MM300 allows to supposedly open a screen in any of the display databases available screen modes, but although Picasso does provide a display database entry, any attempt to open a Picasso screen mode inside Scala is met with the dreaded Guru.

## ABSOLUTE

Rather than using the normal timing in Scala whereby the pause between pages is specified, Absolute Timing gives a start point for the script of 00:00:00 and each page thereafter is worked out in relation to that start point rather than to its neighbour.

The manual mentions being able to take external sync for the timing through EX modules, but I haven't been able to test this to my satisfaction.
Previously Scala would only wipe

## 6 <br> It has a wide range of back-

 drops, fonts and ready-made clip artobjects onto a page, you had to remove the whole page to get rid of them. Several new wipes, including renovations of some of the older ones so that they can be applied to objects as well as pages.
You can now create lines, boxes and circles inside Scala instead of having to produce them in Deluxe Paint and import them. Now you play your samples or MODs directly from hard drive without having to worry about the amount of Chip RAM you have left. You can also attach a "mark" sound and a "select" sound to buttons for audio feedback of user choices

Some of the EXes have been updated, and some new ones have been


If you fancy a shuffle Scala's the software for youl
introduced. The Midi EX now interfaces with Blue Ribbon's One Stop Music Shop and Triple Play Plus Midi interface.

A feature called AutoMagic button creation lets you simply click on a block of text or drawn object and automati-
cally make it into a button
There's now a separate underline colour - about time too! - and new image processing tools abound. Scala will now allow you to view thumbnails of pictures, brushes and animations in


Interactive animation, multimedia ot it's best


[^6]its new shuffler file requester and allows you to have a preview of 24 -bit IFFs on AGA machines.
When you bring a picture or brush into Scala now you can resize it, change or reduce the number of colours using Floyd-Steinberg dithering. Scala will also optimise a restricted palette to give the best quality to pictures with differing palettes sharing the same screen.

## DITHERING

AnimLab has also been improved to take advantage of Scala's Floyd Steinberg dithering facilities. Scala's manual has always been clearly laid out, but there are bits missing.
The index isn't brilliant and, as I previously mentioned, some of the tutorial
information is false. Scala have brought out a product that has been consistently innovative, and it now seems that with MM300 they have ironed out some of the annoying bugs

## Ch-ch-ch c

Scala has some of the finest transttions seen this side of a Toaster, and there are several new ones with this release. One of the features I particularly like is the ability to chain text effects together.

If you apply, say, the wallpaper transtion to one line of text it's a bit difficult to see what's going on. However, If you have several lines of text and you chain them all to one

## Mediapoint

MediaPoint comes on a total of six disks, the second of which can be used as a CDTV boot disk for using the CDTV XAPP. It has a 217 -page manual which states that the minimum requirement to run MediaPoint is at least 1 Mb of chip RAM and 2 Mb of fast RAM, Kickstart 2 and a hard drive, but they recommend a minimum of 2 Mb of chip RAM and 4 Mb of fast, Kickstart 3, and a 68020/30/40.

MediaPoint uses the by now familiar Installer utility from Commodore. As an aside, here's a gripe I have with all developers who use the Installer.

When I install a program I would like to know if the installer is going to create a drawer automatically, or if I have to make one. So many times now 1 have created a drawer for the software to be installed into, only to find out that Installer has put it into a drawer called whatever the program is inside the drawer I already made.

It's either that or 1 don't bother making a drawer for the package and I end up with a sprawl of files all over my hard disk! So, please, all you developers out there, let me know whether or not you are going to create a drawer!

Ahem. Well, to get back to the point... MediaPoint installs itself into a drawer you

## Tifile


have to make (at least it tells you!), and as usual with the Installer, things are pretty painless. There is one assign which is automatically placed in your user-startup and away you go.

MediaPoint's interface takes some getting used to when you have been using Scala for a while. As with Scala there are two separate interfaces - the script editor Untitled - Main


Parent Play
17:14:36 11/12/93

## MediaPoint can only manage secomd in the boring grab competition but if it wasn't for the collection of xapps it could of ta title

and the page editor - but in MP there are almost two entirely different programs.
The script editor is fairly straightforward; just drag an icon from the bank on the right side of the screen over to the script and let go. A requester will pop up asking for the appropriate action.

## BEVELLED

The page editor has a completely different interface. In it you create boxes into which you can type text, import a picture, both or neither. You can't do anything without making a box first. Because everything is based around this box format, it means that you can have a bevelled box with a picture in it (scaled to fit, or cropped, as you wish), with text on top of that.

And what's more, the whole thing is one object and can be moved around as such. The page editor has a menu that lists all the currently active programs on your system so you can create a box in the page editor, switch to DPaint and knock something wonderful up, in a matter of minutes.
Then you switch back to the page edi-

tor and grab the DPaint screen into the box you have created. MediaPoint is certainly very fast at remapping and scaling bitmaps so they fit in with your plans.

The page editor is also supposed to support other file formats dependent on Datatypes, but I couldn't bring anything in through that method. The program-
ther plagued the early versions of Scala watimedia.
I telieve that there needs to be some vert of solution as far as the dongle pes. Perhaps a different version of the
dongle for the Runtime Player (or preferably none at all).
It seems a little silly that you can't show off any of your creations to anyone except on your own machine.

## ch-changes

fine with the wallpaper effect, Scala matumes that those lines are all one Es ebject and applies the effect teiss them all as a single unit rather tan individually.
As previously stated, you can now wise text off a page as well as on to it, coeh opens up a whole new field of ane-page scripts. Why bother to keep maming backwards and forwards antreen pages if you can put all the
text you like onto one page and bring it on and take it off when you want?
Of the new transtions, the one tike best is the Fade to White, which does just that; it tades the current screen to white then fades back to the next screen.
Very impressive. The one I like least is Ants. It's far too slow, as is dissoive.

## SYSTEM ESSENTIALS <br> RED - Fssential YELLOW = Recommended



## The bottom line

Product: Scala Multimedia MM300 Supplier: Scala UK, Mill Studio, Crane Mead, Ware SG12 9PY Tel: 0920444294 Price £329 including VAT

## Ease of use 8

You can get right in there and immediately start creating presentations. Manual? What's that?

## Implementation 9

Logical interface, great output

## Value for money 8

With the price drop, Scala becomes even better value

## Overall 9

Getting better all the time. Scala is a good reason to buy an Amiga


SMPTE timecode with a huge array of plug-in modules waiting in the wings
would read the file I had selected ponder for a long time, then put garbage on the screen and ask me if I wanted it.

Unfortunately, seeing as the only option I could select that worked was Cancel, I couldn't get the image into the page editor even if I had wanted to.

The whole thing bears an analogy to Amiga DTP packages. Where ProPage and MediaPoint both require you to put boxes on the screen for everything, PageStream and Scala both allow you to plonk your cursor down where you like and start typing.

With MediaPoint you have to add a page to the script after it has been made. You can pull over a Page icon, select Cancel when it asks you for a file, the click on the icon you have dragged and edit the page, saving it out afterwards, but then you still need to reopen the file requester and choose the file you have just edited!

This means that your hard drive is going to get very full of pages and pages of MediaPoint stuff very quickly. Another gripe about this method of operation is that there is no way of previewing what

## You can create a differnt look by making the wipe really chunky or fine

your page will look like except by coming out of the page editor, making sure that the page you want is loaded, then showing the page.
This is OK if you only have to prepare one or two pages, but what about once you have 50 or so? Also, while you are editing your pages the screen is properly centred, but when it comes to playback time, the whole lot is off-centre.

I realise that this is for accurate placement of the graphics onto video, but what is the point of having the rest of the interface at normal offset if you have to fiddle with your screen controls every time you want to view what you have created? I
feel another potential problem with MediaPoint is that it has so many keyboard short-cuts for the user to remember that aren't obvious and have no parallel menu item or button,

Thus a great deal of the potential of the product will be wasted with people not knowing, for instance, that it is perfectly
possible to bring a window, picture and the text for it (one object) into and out from the page with different timings and effects for each item. You can press function keys, Right-Amiga-key combinations, Ctrl, Shift and Alt combinations; the list is endless. MediaPoint comes with a very



MediaPoint Interactive Demo
A point of sale information system in the making
nice selection of wipes, fades and dissolves. There are some that are much better quality than their equivalents in Scala. However, there are also quite a few that are almost useless, even at the fastest speed, unless you really want a transition that takes nearly a second to complete.

You can apply about half the total transitions to objects in a page, with the obvious absence of a random transition because your pages are pre-saved. Each effect also has variations on a theme, so for a straightforward wipe in there might be two variations: normal speed and ease-in.

The size of the blocks that make up some of the effects is usually altered by the variation slider so that you can create quite a different look simply by making the wipe really chunky or fine.

There are a couple of additional transi-

## Tetchy tutorials

The various tutorials that come with MediaPoint show you how to create scripts with serlal and parallel branching (more on these later), how to make buttons and bind them to keyboard short-cuts and how to record the timing of your pages to match sounds to an animation, or slides to a soundtrack.

Unfortunately, the very first tutorial leaves you with a sense of "so what?". There are errors in it and it gives you nothing to play with. The ones that follow on are a littie better. but throughout there is no sense of learning, just one of following instructions.

That having been said, a nice touch is the inclusion of finished versions of the tutorial scripts so that you can check your efforts against them.
tions that are specifically for POI systems, one a sort of wiggle. Imagine you have an arrow pointing to the button you want the user to push, wouldn't it be nice if you could get the arrow to point repeatedly at your button? Well, that's what wiggle does. There's also a blink transitions for the same sort of attention getting device.

MediaPoint comes with some pretty nifty features; Serial and parallel branching are two of them. Serial branching is just a case of having a subroutine in your script that might be activated by a button for instance, parallel branching is a lot cleverer.

## SOUND EFFECTS

Basically a parallel branch is just like putting another page into your script only it's not just one page, it could be an animation with synchronised sound effects, or an entire slide show, but at the main script level it just looks like one command.

In a serial branch the order of the events is important because they are executed one after the other from the top down. However, with parallel branching the order of the events isn't important but their timing is.

When you open a parallel branch you have to say how long you want it opened for. You then get a timeline upon which to place your events. This is the only important thing. You could have your events in alphabetical order, but the one that comes first is the one first on the timeline. Look at the picture; it's easier to understand that way.

MediaPoint has an excellent attitude to type. If you want to change one letter of your line from white 12 -point Times to shocking pink 114 -point Letter Gothic, you can!

You can specify font style, spacing underlining, colour and size on a charac-ter-by-character basis with no limitations other than those of good taste!
MediaPoint is able to schedule events over a long period of time. You can specify when you want an event to happen;


Yet another look at the famillar MediaPoint front end
every Thursday afternoon at four, or three times an hour every day at midnight, except on Sundays - for instance.

You can set timing from your Amiga or an external source such as a Midi timeclock, SMPTE or EBU timing for frame accurate video overlays with one of the MediaPoint-controllable video recorders or laser disc players.

MediaPoint can put things like the time and date into your script if you wish, in various different formats. To all intents and purposes, these just get treated in exactly the same way as normal text while the presentation is playing, they do not update on the screen as it is playing!

You can also specify global hotkeys even to the point where you can stop people from quitting out of your presentation by disabling the Esc key completely.

MediaPoint's manual is a little lacking in in-depth information. It seems pretty thorough when you are reading it, but when it comes to referencing something you are having trouble with, if you can find it in the index, there just isn't enough explanation.

## UP TO SCRATCH?

I was really looking forward to reviewing MediaPoint. I have been waiting for its release since November last year, when I saw it for the first time at the World of Commodore in Cologne.

I went again this year and got myself a copy to review, but I have to say it's not up to scratch. I don't know what was wrong with the product that delayed it for so long (as there is no noticeable difference between the version I am reviewing and the version I saw last year, other than the name change), but it's let Scala catch up with it, and even overtake it.

But if Activa get some of the problems sorted out (ie the data types not working properly, the lack of a previewer in the page editor, the slowness of some of the transitions, etc), I think they've got a winner on their hands.

SYSTEM ESSENTIALS
Hownir


## The bottom line

Product: MediaPoint 3
Supplier: Activa UK
Tel: 081-402 5770 Price £300

## Ease of use 7

Fairly simple to get to grips with the Amiga idiom of dragging icons around is easy to understand.

## Implementation 8

Good interface, the mantral doesn't stand up so well to scrutiny, but the finished presentations are superb.

## Value for Money 8

A professional product at a professional price.

## Overall 8

A good start for this new package If it gets updated as regularly as Scala, we should see a fierce battle between the two for worid domination of the multimedia market. Designed to bring you high performance at
affordable price AmiTek peripherals offer
outstanding value-for-money. They are
also designed and built to ensure easy
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## PLEASE SEND A 64 PAGE AMIGA COLOUR CATALOGUE

Mr/Mrs/Miss/Ms: ...... Initials:
Company Name (if applicable):

[^7]
## Which package is best for you?

Over in the blue corner we have the defending world heavyweight champion Scala Multimedia 300. In the red corner we have the contender; he showed up momentarily at the end of last year, but now he's here to seriously challenge the current holder of the AC Best Multimedia Package - we present MediaPoint 3.

The first part of this bout will resolve which of the packages has the best support from the sidelines with clip art, fonts and backdrops being a major consideration.

Well, MM300 gets a good one in early on with the fact that Scala now has nine new backgrounds bringing the total up to a massive 79 , along with a wide selection of single colour pictograms.
MediaPoint has a very small number of included backdrops but scores highly with its maps, colour clip art of various computer-oriented items and single colour ISO 7001 -compliant pictograms.
Scala gives you a printout of its backdrops (unfortunately without the nine new ones) whereas MediaPoint has no documentation for its backdrops. Neither package has printouts of the clip art included. Scala gets a blow in late in the first round with its 17 -strong collection of fonts in different sizes (with print outs for reference) compared to MediaPoint's nine fonts (without print outs).

## APPLICATIONS

Expandability-wise, MediaPoint immediately jumps to the fore with a menu that is designed for the user to add his favourite applications to, much like ToolManager for Workbench.
Any time you wish to run an external program you simply choose its name from the menu. Scala has the ability to add in outside applications too, but they must be placed in a specific drawer in the Scala directory and they have to have tooltypes set up to use them.
MediaPoint's ability to grab screens from other applications and bring them in, thus obviating the need for intermediate file storage, is a plus; just draw what you want in Personal Paint then grab the screen into the program.
No need to save your picture, then load it in again. MediaPoint say that their package has expandable transitions - just drop new ones into the system drawer of your MediaPoint installaton. Scala's are hard coded. Both packages support add-
on modules in the shape of EXs for Scala and XAPPs for MediaPoint. As you can see from the box-out, both have an extensive collection of add-ons with Scala coming out tops for genlock support, but MediaPoint supporting a wider range of Laserdisc players and VCRs.
Scala also has an EX called "Link" which is to allow certain other applications like Bars\&Pipes Professional to control a Scala presentation.
I tried to use the External tool for CDTV in Scala (EX) and in MediaPoint (XAPP). Unfortunately, neither of the packages give very much space to the topic - they simply tell you "there is a button here for the start of the section" and no more! Both systems have an easy way to just connect a CDTV to your machine via a null modem cable.
Attaching a floppy drive to the CDTV and booting one of the distribution disks

## Competition should ensure a healthy drive towards new

 features(disk 1 for Scala, disk 2 for MediaPoint) will ready the CDTV for EX/XAPP use. Both systems displayed problems if you played several segments from the CD at length, then exited back to the main screen.

All in all, I think that the quality of the documentation for this topic left a little to be desired, and I only hope that the other modules are better catered for in this area.

Scala also makes mention of a program called Scala Echo, which, it appears, is to be run as an EX to allow you to perform assemble edits à la Video Director.

As far as fades and wipes go, MediaPoint weighs in with 83 page effects, most of which have at least three or four variations, but only 42 text effects with variations.

Scala has 103 page effects and a stag. gering 86 text effects, a lot of those new to MM300. Both of them do your standard wipes effectively, with MediaPoint possi-
bly just having the edge over Scala in terms of smoothness.

In the more exotic wipes like the T 2 or "Rows Odd/Even Bottom" they are evenly matched. MediaPoint loses out with its "you have to save the page first" approach in that you can't have random text effects.

Scala's colour fading works better than MediaPoint's too. With Scala, the transition almost appears to be a natural progression of colours, whereas with MediaPoint the colour changes seem to be harsher. I think this has a lot to do with the way backgrounds are set up in Scala to share the last eight colours of their palette.

## CONCLUSION

Without a doubt, this bout could continue on into the night with both fighters scrabbling for that extra advantage that would see his opponent on the mat.

In response to MediaPoint's low price Scala's has been dropped to $£ 329$. In the final analysis it will matter little as both have unique features to offer. Scala seems the better package, at the moment, but it is a seasoned piece of software, while the newcomer has all the exuberance of the young, striking out into new areas, and new ways of behaving.

MediaPoint certainly has some maturing to do, but, and I know this is going to sound like a cop out, both packages complement each other in the features they offer.

This will make it very difficult to just buy one of the packages, prospective buyers should certainly not just jump at one or the another but look at them side-byside, as I have, over a period of time, to see which ones features best suit their needs.

In conclusion, I have to say I am glad that there is, at last, some serious competition for the title of "Best Multimedia Package", the inherent competition between the two packages should ensure a healthy drive towards adding new features and external applications; how about a PhotoCD XAPP/EX?

What about support for other font formats and the SSA animation format? What about support for other graphics cards and control for the add-in modules for Opalvision (when they finally come out!)? Come on Scala and MediaPoint, give us your best shot.

## Add-on modules comparison

|  | MPoint | Scala |
| :---: | :---: | :---: |
| CDTV | yes | yes |
| CDXL | yes | no |
| Interlude | yes | no |
| Canon Ion | yes | yes |
| GVP IV-24 | yes | yes |
| GVP G-Lock | no | yes |
| SuperGen | no | yes |
| G2 Genlock | no | yes |
| Genlockr | no | yes |
| Midi | yes | yes |
| Studio 16 | yes | no |
| AVideo | no | yes |
| VideoDisc/VCR | yes | yes |
| Sony LDP-1200 | yes | yes |
| LDP-1500 | yes | yes |
| LDP-1500P | yes | yes |
| LDP-1550 | yes | yes |
| LDP-1550P | yes | yes |
| LDP-1600P | yes | yes |
| LDP-3300P | yes | yes |
| LDP-3600D | yes | yes |
| Sony 2000 | yes | no |
| Sony Umatic 9 | yes | no |
| Pioneer 2200 | yes | no |
| LD-V4100 | yes | yes |
| LD-V4200 | yes | yes |
| LD-V4300 | yes | yes |
| 6000 | yes | no |
| 6010 | yes | no |
| LV-V8000 | yes | yes |
| Philips VP series | yes | yes |
| Philips 405 | yes | no |
| Philips 410 | yes | no |
| * Philips 835 | yes | no |
| NEC PC VCR | yes | no |

* unless they are part of the VP series


## Trading places

Just as a test. I decided I would take a domo seript from each and try to do them in the other. I took the Sales Chart trom Modiofoint and thted to bulld the same pre sentation in Scala. I also took the LoScalatore script from Scala and tried to recreate it in MediaPoint.

The Scala version of the sales chart is definitoly not as poliched as the Mediapoint one. Modiapoint has the ability to only partially bevel a box so that you can have
a flat bottom edge to the chart, it also has an -extrude Wind of wipe that Seala doesnt.
I tried the move wipes in Scala, but of course they wipe from the edge of the page, not from a predefined place.

The MgdiaPoint version of the LoScalatore script also ran into problems. This script plays several anims seamlessly end-to-end showing a film of a man put a

## ladder up against thin air, climbing it and disappearing

 at the top.Mediapoint could do the animation part without problems, but came unstuck on the accompanying music and sound FX .
The tune was completely disterted and I couldant wouk out how to get the applause to ccincide with the

MediaPoint is the state-of-the-art in interactive presentation software. No other software package on the Amiga has this many features in the standard package. Some of the highlights:

## MediaPoint is professional:

- Script synchronization on standard time, SMPTE and MIDI.
- Play full motion video and samples from harddisk. Supported animation formats: anim-5, 7 \& 8 and (AGA) CDXL.
- Over 150 smooth screen and object transitions.
- Use buttons to create interactive scripts for mouse, keyboard and touch screen.
- Script events can be scheduled to be displayed on specific days and times.
- Use ScriptTalk ${ }^{\text {M }}$ language to create customized scripts with variables, conditional jumps and ARexx support.


## MediaPoint is easy to use:

- Cut, copy, paste and undo for all page and script editor functions.
- Script parts can be collapsed and exploded.
- Text editor allows a different font, size, color and style per character.
- Antialiasing per character color, not to just one color.
- Frame-oriented page editor with solid, pattern and transparent frames. Over 50 frame transitions.
- Duplicate, centre, align, lock and group move functions for frames.


## MediaPoint means good looking, fast graphics:

- Import any Amiga graphics file including 24 bits.
- Scale and remap to any (AGA) graphics mode.
- Save page layout including text and graphics for use in other scripts.
- Ready to use clipart, maps, pictograms, fonts and sounds included.
- Fast color thumbnails in file requester for easy file browsing.


## MediaPoint is modular:

- Xapp™ modules for GVP's IV-24, Studio 16 cards, MIDI, CDTV, LaserDisc players, VCRs, still video players. Coming soon: Video Toaster xapp.


## MediaPoint is complete:

- Standard bundled languages: English, French, German and Dutch.
- Free runtime player.
- No hardware key protection.

MediaPoint is a trademark of MediaPoint Int. All other brand names are the property of their respective owners. For more information:
Activa International Inc. +31-20-691.19.14, Fax: +31-20-691.14.28.
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Protext spell-checking the currently selected text block

The normal method of reviewing a product is, it must be confirmed, the tried-and-tested routine of first checking out the software/hardware or whatever, struggling with its idiosyncrasies and hidden delights (usually all before reading the instruction manual) and then taking a pile of notes to the nearest available word processor.

In this case, however, the nearest word processor just happens to be the exact product under review, due not in any small part to the fact that I pounced upon the product before it even left our mail bag and staked my claim on the review!

POYNERFUL
Protext is, you see, a rather special type of word processor. Available across a number of platforms as well as the Amiga (it even features as the built-in word processor for the Amstrad Notepad range reviewed previously in this magazine), it is an extremely powerful program, but one which cannot offer too many machine-specific (read: flashy) features.

As the platforms at the lower end of the CPU speed range (such as the 68000 Amigas) need to run Protext at a reasonable pace, it is a bare-bones product, and one which, through both familiarity in users who need to use it on more than one platform, and through an approach to

text-bashing which is pretty much unique to itself, has ardent fans everywhere. To elaborate upon my personal position: As a heavy word processor user, key features like speed, macros, keyboard short-cuts for menu items (much quicker - once you've learned them) and a no-frills approach (frills lose their flashiness long before a product outgrows its usefulness) are important to me.
As I only own a humble A600, which is

## I can see clearly now

Protext has traditionally been known to pander to graphics by a seriously tiny amount, resulting in its image as the ultimate text cruncher - and little else.

That said, the program now supports IFF, PCX, GIF and GEM IMG graphics files, and can print them at any point in a document (in black-and-white). It does not display the graphics on-screen at any time, instead inserting a marker to warn you of the presence of a picture.

Although highly primitive compared to the likes of some of the near-DTP socalled "word" processors, this is to facilitate speed in the program's primary role as a text cruncher - any anyway, the program does now at least permit the addition of, say, a graphical masthead or piece of clip art on a news-sheet or company letter.

Images can be centred, scaled, turned into negatives, and generally shifted around enough to not render this feature totally useless.

## Improved manuals

Thankfully the manuals have been reprinted for the new version - it's not good in find a list of changes in addition to a set of manuals for a previous version, as a the case with a lot of upgraded software.

Is it is, the manuals are neat, informative and thorough. There are two: The lint, entitled the User Manual, is 180 pages long and contains a broad introduction to word processing and Protext; a concise (but at times vague) Getting sarted section, an overview, a guided tour, detailed instruction, hints and tips and a thorough index.

The second, 160 -page manual is for reference, and contains the really detailed Intormation on how to use Protext's most powerful functions, such as the macros and mail merge features.

It contains character set tables as well as useful advanced user information, like compatibility details across the various platforms it has and does nepear on.

It would have been better if the manuals were ring-bound; however, they're perfect bound (like a book) making it more of a task to prop the manual open on a page while you attempt to do what it is suggesting.

A small niggle, though. And anyway, you probably won't find yourself looking too much in the manuals, for the on-screen Help is excellent.

When it comes to text formatting, how about the ability to format paragraphs separately or the document as a whole, or features allowing the insertion of soft hyphens and footnotes, or start-of-paragraph formatting (regardless of any Tabs you might have set)? All are under Format.

Printing has always been one of Protext's great strengths, and this version keeps up the reputation, with a diskful of drivers, and advanced features such as the ability to print what's on-screen or from a file on disk, to interrupt printing - or to turn Protext into a by-line or by-character typewriter. Someone must have a use for this function!

Using a large Collins on-disk dictionary, the spell checker can check a single word, check from the cursor, or simply do the whole document. There's an integrated thesaurus even an editable user dictionary and the
much else, number-crunching routines, file spoolers and line-number handling, as well as the word count, which is telling me I'm running out of space to cram all of these words in!
Suffice to say that with a full and definable range of viewing options, a powerful (but easy to use) macro generator which allows one-key programming of sets of instructions you frequently carry out, and even a line drawing option, there is about as much flexibility as you can hope for built in to this program.

## CONCLUSION

So in conclusion, I can report little to moan about - if this sounds like what you're looking for. For the heavy user, who's prepared to negotiate the learning curve to get all of the keyboard short-cuts sussed, there's an immense increase in word processing efficiency to be discovered.

By forfeiting time-hogging frills and nice screen displays, Protext can offer not only compatibility over a number of platforms, but tried and tested speed and reliability too. If you're serious about words, this is the serious word processor for you.

SYSTEM ESSENTIALS
RED $\quad$ Exsential YELLOW $=$ Recommended

IIng abilities are rudimentary to say the mest, and that's a far sight better than Sose offered in v5.5, which says someting about who this program is aimed at! As well as containing the Quit and Belp functions, the File mode concerns self with loading, saving and handling erment and saved text files. As well as the atranced abilities to catalogue files in a tilder or a disk, there are Save As (various tyes of Ascii) and File Merge options, as well as a simple document renaming soutine.

The second menu, Swap, allows you to work on two documents at once; one in the top and one in the bottom of the
screen. You can type up notes into a finished piece by having the notes scrolling in the top window and the developing write-up in the bottom window, for instance.

The Edit menu handles strange characters (all kinds of accents and foreign ones are easily accessible), offers powerful textsearch features (you can even search backwards), as well as page-jumping and time and date insertion commands. Meanwhile its neighbour on the right-hand side, the Block menu, allows cutting, copying, moving, pasting, deleting, saving, loading and formatting of any chosen block of text, markable by keyboard or mouse.
ability to sort out anagrams. Great for crosswords!

The Style menu, although only a couple of obscure-looking options to look at, hints at the real power of the program. Here you can define "styles"; you could have a style for business letters, one for memos, one for (as a journalist) articles, and switch between them. All you do is tell the computer the style you want, and it remembers how you like to have, say, a business letter. Neat.

The Tools and Options menus contain a rag-bag of configurational and miscellaneous feature - which is not to distract from their value. They contain, among

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RAM
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## The bottom line

 Product: Protext Price: £99 Supplier: Arnor Ltd Address: 611 Lincoin Road, Peterborough PE1 3HA Phone: 073368909 Fax: 073367299Ease of use 9 Implementation 8 Value for money 8

Overall 9

This is one of the many nested menus in the comprehensive Configuration utillty


Here one of the display mode parameters is being altered

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## ROUND-UP

Ever since man has walked the earth, he has been perplexed and obsessed with flight and the ability to defy gravity. The awakening of this dream was triggered initially by birds. The Egyptians worshipped them as gods, as did the Incas, Mayans and many other early high-tech cultures.
The Greeks were probably the first to write about flight when they told the tragic tale of Icarus and his doomed maiden voyage, simulating the flight of a bird.
As we follow a path through the annals of history, conquering his inability to transcend to cloud level has been man's greatest single desire.
The artist Leonardo Da Vinci designed the first prototype helicopter, and the Montgolfier brothers craned our necks a little nearer to the stars, by defying gravity with the first flight in a hot air balloon.
But, it wasn't until the turn of our present century on that fateful day at Kittyhawk that the Wright brothers finally satiated the desire.
Following this significant breakthrough, mankind really rolled his proverbial sleeves up and got stuck in. Frank Whittle develops the jet engine, bi-planes became mono-planes

picture: Redifusion
which in turn have become delta-winged supersonic craft capable of breaking the sound barrier.

For a privileged few, the sky really has become the limit, and that's the way it was set to stay until the technology race in home computers began.
For the majority of us, the chance of piloting any sort of flying craft used to sit only in our wildest dreams. Whether it be the cost, the ability or the practical availability doesn't really matter, because the realisation of the obsession is still a runway to far.

Until recently, that is. Computers mean that flight really can take place in your front room. There's is no mystery as to why flight simulators have been developed so intensely for home, civil and military use. The answer's very simple and lies in the very first paragraph - we are, and always will be, obsessed with flying and its emulation.

So, without further ado, let's zip up our bomber jackets, adjust the chin straps on our helmets and peruse our instruments, while we indulge in a few pre-flight checks down memory lane.

## Combat Afr Patrol Psygnosis

First completed about a year ago, CAP encountered production problems and was held back until very recently. As we speak, CAP is probably the newest simulator to roll off the production line.

Combat Air Patro is an accurate reproduction of the F-14 Tomcat and the F-18 Hornet, two of the United States' most trusted combat planes.

Set in the Gulf War, your primary objective is the expulsion of enemy forces within the boundaries of Kuwait.

In CAP you not only have the choice of planes to control, butyof also take on the role of stormin' Norman and command all of the land-based forces.

As with the malority of flight simulators. Combat Air Patrof follows a pattem that you are no doubt very familiar with: armaments-screens, difticulty levels and soion.
What makes CAP the - 30 -encine Psit than-many of its simulated-opponents is - engmetirsygnosis have come up with an amazingly slick system, which is probably about the smoothest seen on an Amiga.
The beauty of Combat Air Patrol is that it plays as smoothly on an-A500 as if doés on a A4000, leaving no-one disappointed at pretty graphies and no playability. of 마

Overal, CAP is an extremely competent player in the simulator market and $F$ B.features soine very cleyer little touches that will keep you stimulated for $\frac{1}{2}$ : good while!

##  IVIENCETHI Electronic Arts

Although it's now one of the more mature Amiga simulations, Interceptor has found its way into the collection and the hearts of many potential aviltors.

Released in 1988, it came to many of us early Amiga owners by virtue of the fact that it was part of one of the first titles to be featured as a bundle package. Designed by leading flight simulator Bob Dinnerman, Interceptor was the first to give you the choice of flying more than one jet.

Set over the skies of San Francisco, you have the option of flying the F18 Hornet or the much celebrated F-16 Fighting Falcon. Based either on a carrier or land, Interceptor sends you on progressively more challenging missions, from the learner mission of identifying an unknown jet, through to successfully sinking an enemy submarine.
Interceptor sits heavily on the entertainment side of simulation. There are flight manoeuvres that you can pull off in interceptor that the military would be green with envy for.
Nevertheless, Electronic Arts freely admit that Interceptor is more of a fun sim, than a realistic seat in a cockpit.
9 Although the graphics are a little dated, with simple polygons to display buildings and fairly slow screen updates with the enemy plane very often orly appearing as a speck, the play doesn't suffer profusely. Likewise, the flight area and missions are a little restricting, but Interceptor still has a great deal to ofter. It was one of the innovators of such things as external camera angles, 200 m facilities and most of all jts highly playable and instantly accessible fun!: :"


Here's an unusual departure for a flight simulator on the Amiga. For one, it's the only attempt to replicate a craft that is capable of VTOL, and secondly Harrier asks more of you than the normal pre-set missions you normally get in a flight sim.
One aspect of your role is to command a landing force of US troops in hostile terrain, the other is to control a squadron of Harrier jump jets.
Set on islands around southeeast Asia, your job is to offer support for the invasion force as they push further inland, and protect them from both air and land-based enemies. Harrier contains all the hardware and optipns you've come to expect from the newer breed of Amiga simulators. The Harrier being a Vertical Take Off and Landing craft, the control system takes some getting used to when you first take the helm.
Nevertheless, it doesn't take too long before you get used to the fact that you can practically hover and land as a chopper might.

Constructed from a variety of vector polygons, the graphics in Harrier Assault are as competent as the majority of flight sims.

Harrier is most playable, and will be best utilised by true enthusiasts who can devote the time this accurate simulation needs. Harriers only downfall is that the 3D engine seems to struggle on normal low end Amigas, and is probably best played on larger accelerated machines like the A3000 and A4000.

## f fancy

Flight simulators have always been big business in the home computer market, for games players and enthusiasts alike. Simon Clays demists his goggles, takes a retrospective look and sorts the best from the rest


Until a year ago the definitive helicopter simulation would have been a toss up between Thunderhawk or 2000's older brother, the original classic Gunship. Times have moved on and MicroProse programmers have given birth to a new prodigy. Gunship 2000 puts you at the controls of a range of the world's deadliest helicopters.

Once you've trained yourself up from squaddie, you can choose to fly in central Europe or the Persian Gulf. After you've been assigned to a region, 2000 has a wide range of missions that will be offered to you by the CO.
Gunship 2000 has all the normal munitions screens and maps, but what really sets it aside is the graphics. For Gunship 2000 MicroProse developed a completely new 3D engine which incorporates an updated terrain mapper which gives contour to the landscape.

The ground detail is also brimming with life and contains a rich array of roads, tunnels and even the odd camel. Once you reach higher ranks it's possible to gain promotion, have a unit of choppers at your disposal and get the chance to fly the deadly Apache gunship.

Gunship 2000 is fast, as realistic as you wish to render it, and packed with a basket full of explosive action. You have all the normal external views and zoom options, plus an excellent missile camera which sits you on the front of your warhead as it hunts its quarry. MicroProse have come up with the best flight simulator of any type for the Amiga. Its fast-paced action and graphical quality make it a must for any flight enthusiast.

## F-ziszo Rimus Thalion

The world of the civil airliner has seldom been undertaken for the Amiga. So, it was a welcome release when Thalion revealed their simulation of a medium range, fly-by-wire modem airliner the A320 Airbus.
Obviously, it's a far cry from the electric world of the jet fighter and lacks the thrills of aerial combat (unless you get hijacked that is), but is regarded as one of the most realistic simulations to grace the Amiga.

A320 comes in two packages, ore based in Europe and the other newer addition sits itself in the United States.
Programmed by an ex-Luftwaffe pilot, you start in the briefing room, setting your payload, route details, freight and fuel, You can even set the height of the cloud base which determines the use of your ILS system.

Also, at the higher levels of this simulator, weather takes its course and means you have to plan an alternative flight path to divert to.

Graphically, while Airbus's visuals are realistic, they aren't worth writing home about. Your view is from the left-hand side of the control panel. However, function keys divert you to other alternative views.
The ground detail is also very spartan, but manages to convey the general impression of an airport. Sound, while limited, is effective enough and the engines were actually sampled from the genuine article.

These things apart, Airbus is a totally accurate representation of a modern passenger airliner. It requires you to react and co-ordinate all of the necessary equipment at the correct times from take off through to landing procedures.

While not containing as many thrills and spills as many of the flight sims on the market,
Airbus is a fine exploration of civil transportation which is worth spending some time with.


Spectrum HoloByte

## Fighter Duel Pro

If you're a hard-bitten sim veteran, the appeal of launching yet another heat seekers from $\mathbf{2 5}$ miles out may well be wearing a little thin. After all, it's hard to get excited about a few pixels suddenly vanishing from a radar screen.

If the aforesaid cap fits what you really need is a copy of Fighter Duel Pro. Now I'm not saying it's for everyone, but if your primary interest is in-fight realism, it's unbeatable.
As you can see from the screenshots, the graphics aren't exactly breathtaking. However, it's only when you're at the controls that you experience the most realistic in-flight experience in the business.

Even on an A500 it's smooth as silk and when this is combined with incredibly accurate flight characteristics of both yourself and the opposition, the meagre graphics are soon forgotten.

However depending on your point of view the program does have one major
fault. Put simply, it does what it does, namely ultra realistic dog-fighting - and little else. You're given the choice from a variety of prop-driven fighters for yourself and either one or two opponents. You can mix and match to you hearts desire assigning an appropriate skill level to each bogie.

During combat the bad guys are exactly that, swooping, diving, attacking and evading with a degree of realism which drags you into the action like no other sim on the market.

As for control analogue is best - in combination with a decent mouse to handle the throttle and rudder. Like every other dog-fight sim head to head combat is supported either via modem or direct link. It's even possible to use a second Amiga to supply a constant rear view of the action.

Basically if you enjoy realistic close-up combat and can live without fancy graphics it's quite simply the best seat of the pants flight sim on the market.
 ing the Battie of Britain.

Programmed by Rowan Software, the company behind Filight of the Intruder, the first decision to thrash out is which side to fight for. You can become part of the illustrious Luftwaffe, or play the backs-to-the-wall role of the RAF.
Once that decisis) has been taken, much of the game time is spent in the air. Unlike many simulations, control is taken for an entire squadroh, with the option to filt from plane to plane at a whimsy.
The 3D is very effective and fairfy speedy, although for best results it's best played on one of the high-end machines. Reach for the Skies also features a full range of external 3D views and a zoom option.

Filight while highly playable, Isn't one of the most realistic of simulations and control of your Spitfire or Me-109 is relatively simple.
Reach for the Skies does however contain many nice touches, For example, after every flight you have a full replay option. You also have the ability to start missions from mid-air and you can also accelerate time.

Reach for the Skies should have received higher accolades, and would have done, if not for glitches in the programming which has resulted in several bugs.
Niggles aside, RFSK is still quality entertainment and still sits proudly in the hangar of fame.

## What do the big boys play with?



Flight simulators for the military and civil airlines are perhaps older than the majority of us would believe.
As early as World War II, gunners on bombers were trained in replica gun turrets, shooting at screens which had enemy fighters projected on to them, with a camera recording where the bullets would have struck.
Since then things have progressed somewhat. Pilots now train in multi-million pound hydrauli-cally-powered cockpit replicas, which train pilots more safely and reletively cheaply.

In the simulator world, if a crew put their 747 down short of the runway, they might well have to swallow their pride but they'll live to talk about it, and the airline can still fly its airliner.

There are versions for almost every type of commercial plane flying today. Inside the instrumentation and flight envelopes are reproduced exactly.

Today's simulators are so accurate that some
pilots are able to convert from one jet to another on the ground, and then take their new plane into the air without any further training.

The leading edge of simulation is in the hands of the military who are utilising the technology of virtual reality to throw their pilots into war zones which are frighteningly real.

These VR simulators are bringing a new level of realism which give the pilots a true insight into both the conditions and the brutality of modern war.

picture: Evans \& Sutherland

## Knights of

## the Sky

MieroProse
Knights of the Sky switches away from high powered jet engineering and the pin-point accuracy of modern missile technology and flips the calendar baci to days gone by.

Gone are the fire-and-forget missiles which obliterate an unseen enemy, and vanished are the oh so helpful HUDs which keep you up to date with everything around.

In fact, in Knights of the Sky all you'n left with is a pair of leather gloves, some goggles and a rickety bi-plane.

KOTS is a Worid War I simulator and puts you right in the thick of it, fighting on the Western front. Once you're fully trained, you can fly a whole variety of missions in one of up to 20 different bplanes and mono-planes.

The missions vary from supporting a bombing run, through to buzzing Zeppelins in a balloon-bursting exercise.

As you progress through the wer you are updated with information about other enemy pilots in the region. If you fancy your chances in aerial combst then you can lay down the gauntlet and hunt for them, in your own search for fame.

KOTS features graphics that are ver effectively rendered and planes that H fairly smoothly. In the sound depan ment, there isn't a great deal, but wher is there is adequately dealt with.

By far the most exhilarating aspec to KOTS is the dogfighting. Because the range and accuracy of the on-boart machine guns, you have to fly close it the opposing fighter to score any hits.

You also have the tricky flight con trol of a bi-plane to combat and oves: come. All of this gives you a greer sense of achievement when you see give of grey plumes of polygon smola
With a multitude of external camenes and chase views, an action repial mode and a new budget price, Knigts: of the Sky is a very worthy addition zi: your flight sim collection.

As the Amiga has progressed and developers have become more adept at programming, so the standards has improved. However, in the last 12 months a ceiling seems to have veevreached. The technology inside a standard Amiga has been utilised to the full and the polygons can't move any faster or become any more detailed.

If we look across the showroom carpet over at the PC market, it's clear to see that PC simulators lead the way. Rather than sely polygons with colour and definition limitations, PCs âre moving detailed bit-mapped objects around the screen at a very realistic and rapid rate.
Sverertholocsithie doesnit mean that the Amiga world is never going eviounurions Recent innovations like the CD32 with its piantar coup riave brought promise of a new breed of flight simulator.

Cheshire based DID have been working on the much
awaited TFX, which features a combincowor complex polygons and bitmapped graphics to give an newi lever of reafism. Both the plaries and ground detail feature thisteutmanat? great effect.

It's notyust in the graphics department that TFX should set a precedence. It alsó, features a more advanced way of simulating tiight.

On the majority of Amiga sims currently available, the planes always furn at the same angle as the horizon. Uffortunately this is not absolutely accurate to real flying. In true'fighit the horizon'lies'at ah altogether different angle to the turn of the plane and the pilot's perspective. This extra dimension, whichtyrings a new level of realism, is encompassed in TFX.

With this type elinnovative development about to hit your monitors it couldd.dinitely be time to take to the sky's once more.


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## nain Distributors



## A liftle somethincie..

We don't believe in new year resolutions. What are we going to do - promise you the best in reviews. previews, features and guides?*

For those who've not enjoyed the Adorage experience in its previous incarnation, a little background --ner the first question has to be: What madty lurks behind the rather exotic title?
स it most simplistic Adorage is used to weat life into a static image by applying any Ine of a huge range of preset wipes and diswives to introduce or remove the chosen rechic.
Repeating the process over multiple mages means you can append numerous -ages within the same animation, forming a $\rightarrow$ tinuous sequences with each image "esting its own designer intro and out-tro.
In addition you can add background mages to further enhance the effect, allowmg the chosen graphic to glide effortlessly ver the selected backdrop. However, be waned - mixing foreground and background prochics does require a little care in relation It the palettes of the chosen graphics, trough of course it is possible to specify trich palette is applied in the finished mination.
Although a pleasant touch, the use of zacidrop images does have its limitations, apecially on slower machines. As a consezence Adorage is usually at its best when sed in conjunction with a genlock - and it's


In this situation where it really shines, providing a great altemative to the sometimes presctable efforts of DPaint and the infamous Move requester.

Better still, Adorage uses its very own SSA - super smooth animation - format which as the name suggests offers a fairly dramatic improvement over Anim5.

As for the new elements, the notables include AGA support, two new banks of effects and a slight revamp of the front and which now boasts graphic icons as apposed to the old text-based approach of is predecessor.

Apart from these fairly elementary changes there's not a lot else on offer, although the AGA support does add improved colour along with a more professional feel to finished anims.
Basically Adorage in its new form is great news for the AGA brigade and that's about it. In truth little has changed since the release of the original package, but to be fair it was pretty impressive the first time around so there's little to complain about - apart from the slightly optimistic asking price.

```
Product: Adorage Supplier: BVCC Price: \(£ 79.89\) Tel: 081-567 4623
```



## As promised, AirLink makes a comeback along with the long-awaited AGA update to Adorage

## AirLink

AirLink was mentioned last month in relation to VLabY/C and its unique ability to grab unlimited sequential 24 -bit frames from live video without the need for timecode of any kind.

The only problem is the heavy dependence on user time as the software demands constant tape rewinds ready for the next pass. However thanks to AirLink and the supplied programmable infra red transmitter, all the donkey work can be done automatically.

To achieve this, AirLink makes extensive use of ARexx, linking both VLabY/C and the new 16 -bit Toccata sampler, which when added together enable capture of 24 -bit video and 16 -bit audio simultaneously.

However AirLink's control potential doesn't stop with its VLab and Toccata associations. In fact this ingenious infra-red can turn its invisible talents to anything that ships with a handset - whether that be a sampler, tape deck, CD player, VCR or whatever else.

## Automated Midi

As mentioned earlier AirLink can be put to work on any system that uses infra red, and as a result it's developed quite an affinity with Midi, especially in relation to Bars\&Pipes Professional, courtesy of its extensive ARexx support.

However before you plan controlling an entire recording studio from the comfort of a mother keyboard, it's worth remembering
that all AirLink commands temporarily halt multitasking, as a result its usefulness for live performance can be limited.

However there is a way around the problem. If you have a second Amiga, it can be used to receive Midi information from the parent machine running the sequencer, which in turn could send the commands to the remote via AirLink without pausing the performance.

Even with one Amiga the performance potential of AirLink is still pretty impressive. For example it's possible to issue AirLink commands in relation to specific Midi data, so at the beginning of a song you could hit a key on your synth to activate a CD player, tape deck, VCR or whatever else. All that's required is a little setup work before hand - and of course any set-up can be saved out and used as many times as you want. In short, the sky's the limit, if it's got a remote, AirLink can control it - whether it be via mouse or Midi.

And of course each remote has a unique signal so you can control as much equipment as you like from a giant on-screen button bank with various sections for all manner of hardware.


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CLR LICENCEWARE

## $\left.\begin{array}{c}A \\ S \\ S \\ A \\ S \\ S \\ 1 \\ N \\ S \\ 1 \\ 1\end{array}\right\}$

RNE GTECMO PRCRT:

with the presence of myriad affordable inkjet, dot matrix, and thermal transfer colour meters in the Amiga market, competition Er the lucrative middle ground has become intense, so Star's latest product, the Starjet 144, has a lot to prove. Battling tout with the likes of the HP DeskJet $5 \times C$ and Fargo's Primera is not an easy ask, but the SJ-144 brings with it an mpressive combination of a low price tag and a quality of output to match many more expensive units.

The printer itself is one of those -minutive units which begs comparison with the BJ10, consisting of a stand up sody, a flip-out sheet feeder capable of solding 30 sheets of paper, and a front laading option for single sheets. When plionked on a desktop the result is a very small footprint and a cute little addition to the electronic family.

Setting up the SJ-144 is a simple job and an be accomplished without reference to the manual, but software installation has to be the most user-friendly aspect of the whole package. Wolf Faust, responsible fier some excellent Canon software, has produced a preferences program specifially for the Star range which not only offers close control of all aspects of printing but has an accommodating feel which should put most beginners at ease.
During installation the user is asked to choose which printer driver to install and is then given an opportunity to set the default Starjet preferences such that once installation is complete the printer is

primed and ready to go. If the user feels prone to leave defaults well alone, a custom prefs program can be found in the usual Prefs drawer for later tweaking, giving everyone the chance to make the best of their new acquisition.

A starter kit including 30 sheets of thermal printer paper, a colour and a black ribbon can be found in the box, so there's no reason why full colour pages shouldn't be popping out of the SJ-144 only a few minutes after installation. Once printing starts, however, the user might be in for a bit of fiddling to attain the best results.

Our test model's first few attempts at printing colour pages resulted in a marked banding effect similar to that which most owners of cheap dot matrix printers will find all too familiar. Thin white horizontal lines appeared across the finished page which ruined what was an otherwise rather tasty output in terms of colour approximation and resolution. Much head scratching ensued until a quick phone call to Star and a dive into the 92 page manual brought the answer.

The SJ-144 is blessed with a useful and comprehensive front panel which can be used for the usual paper feed and so on, but which also controls the mechanical operation of the print head. By holding down two of the buttons while turning the printer on, a test mode is enabled and all sorts of trickery can be employed to improve output.

Clicking the Zoom and Paper buttons will move the bands of printed colour closer or farther away from each other in increments of $1 / 720$ th of an inch, a microscopic adjustment which ensures the user should reach the optimum setting after a few tries. This is very effective as a tweak, but it has the drawback that several sheets of the supplied thermal paper and a certain amount of the ribbon's life must be


## Hot to trot

Star's new thermal transfer printer is a colourful performer, as Stevie Kennedy found out

## Buffalo Bill's haemorrhoid treatment

Satisfaction guaranteed or your money back...
 program gives users more control

Text and graphics output is very clean at $\mathbf{3 6 0}$ dpi

## Judging print costs

Like all colour printers, the $\mathrm{SJ}-144$ must also be judged on a cost per page basis, a job which is trickier than it seems. Manufacturers seldom use the same standards when quoting the number of pages achievable with a standard printer ribbon, but Star's touchstone is at least based in the real world.

Using a 1500 character letter (roughly 250 words on a page) Star claims that the average yield from a monochrome ribbon should be 180 pages, and 8 full coverage ( 8.0 by 9.6 inches) colour pages from a colour ribbon, which works out at about 75 p per colour page and 3p per black and white letter.

Users can buy a pack of three ribbon cartridges from Star for $£ 18$, and overhead projector film comes in at about $£ 9$ for 100 sheets. Thermal paper is of course recommended, but the SJ-144 has the advantage of accepting plain paper as well, which is cheaper if not as effective.
sacrificed to it. Once satisfied that banding has been eliminated, the user just holds another button down until the macro indicator confirms that the setting has been stored, and the printer should come to heel on every subsequent boot-up. Given the method of printing used by the SJ-144, this is an inevitable drawback, but at least there is a fool-proof way to circumvent it.

All hardware settings having been chiselled in ROM, the user need only experiment with the many dithering options available through Mr Faust's prefs program until the best results are achieved, and when print density is set to its highest (360dpi) these can be very attractive.

Quality judgements are purely subjective and based on the dithering option used, but the SJ-144 seems to have a definite edge on the HP550C and is very close to Fargo's Primera, though it could never match the latter's Dye Sublimation output. For the asking price, Star's latest launch is an attractive buy for those in need of a logo generator or something to give those letterheads an extra burst of vivacity. Love never dies - in Bram Stoker's Cran Cran


## This month we've put our heads together with Columbia Tristar Home Videa to bring you a truly excellent Dracula competition

Following on from the amazing success of the cinema film, Psygnosis' Dracula garne for the Amiga will soon be released. As well as the game the selection of prizes also consists of two great videas just out - Bram Stoker's Dracula and The Making of Dracula, directed by Francis Ford Copala, and the Dracula board garne, plus the CD soundtrack.

The Dracula story follows the original Gothic version of the lave-torn bloortsucking Count. As Transylvanian prince Vad Dracul returns from battle to find his beloved wife has taken her life believing him to be killed in battle, he denounces his allegiance to God and embraces an eternal and immoral existence in the shape-shifting body of a dreaded vampire.

Many centuries later Dracul meets Jonathon Harker, an estate agent, and Alscovers that Harker's beautiful fiance is a reincarnation of his own long lost wife, Mina. The drama continues as Dracul attempts to seduce Mina while Harker engages in a fiercely passionate conflict to defeat the tragic Dracul.

To enter this Gothic competition all gou need to do is send gour answers to these three simple questions and the tle breaker on a postcard to Amiga Computing Dracula Competition, Europress Direct, PO Box 2, Ellesmere Port, South Wirral LES 3EA. Don't forget to glve gour name and address and let us know if gou don't want to recelve promotional material from other companies.
Durestion One - Who directed this version of Bram Staker's Dracula?
Durestion Two - As well as the game, the two videos and the CD soundtrack, what is the other prize?
Durestion Three - Name ane of the things that will deter a vampire.
Tis Breaker [in no more than 20 words] Count Dracula was a good bloke really because...

Entries should arrive no later than Fehruars 23, 1994. The prize winner will be drawn from all the correct entries recelved and will be Informed in writing within twa monthse of the closing date. Fesult information may be obtained by writing to our offices. The edftors decision is final, no correspandence will be entered into.

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invaders type game, ite object being to deleat Alan
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The The aim of this game is to cause as
much damage as possble. OO25-DPAGONS CAVE. A dungeon
masher sjop puzzle game masler sjye puzzie game.
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superior processor
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GO40. PARADOX - Furky puzze
game - Wibele WORLD GIODY - A
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excellent game is to run owar tles excelient game is to run over ries
pusing specicic ones down to open
gater winch alow you to reach the exit. Do it wthin a bime lime to the
progress. progress.
Gofz- DR . MARIO - Similar to a NE
game ot simlar name but better Graphics
So3. ASSAULT - This average game
molves you shooting allte imvolves you shooting at the
characlers that pop ip in the windows.
GOF64-DEATH BIVGERS IN SPACE. A Xenon style shoot em up.
GO65-ZOMEIE APOCALYPSE. Good hun wh lots of blood and guts
GOEf - STARIANS - Blizare platorm game. SUPER SKODA CHALLENGE
GO67.

- pood game for up to four players with rad game editor etc to lour players
GOES - PREMMER PICKS - Very unique toobail management game, very well
prosentod aghts to escape from prison.
ionge GO70. AMIGABOY. The n game
Tetris is widely regarded at is best on the Cameboyy thas now been
perfactly converted. with exact visual tepresentation
GO71-ACT OF WAR - A game of
similat A similar shle to risk
GO72. AbAMS FAMLY QUIZ - How
much do you know? GO73. PARACHUTE JOUST - Guide the shydver to the ground
GO74-CARD SHARP. Various card Gomes. JEWL A A britiant game
GO76-TOP SECRET - Sarry, cant tell Gou7t - JEUY QUEST - This game by
David MoGuire was described by Amiga Power quote It's a superior
brand of PD puzze game and brand of PD puzzle game, and sts
looks can ony be described as dead
Iush It want on to recelve a 4 out ol 5 star rating
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Ifyou've attended any shows or spent much time on-line lately you'll be all-to-aware that faxing is the in-thing vice it comes to comms and electronic amrunication in general.
Bat what if you bought a modem that Is te potential to become a fax but simply -t' got the appropriate software? A $\ldots$ modem isn't cheap so the prospect It elling up just to have a fax facility on a -ive spec modem isn't exactly appealing.
Now thanks to Village Tronic upgrading s so longer a necessity, courtesy of some ngmious software which can add a fax acility to any Class 2 modem.
\$ other words the majority of older and -ver modems running at or below 2,400 ned may not be compatible, and unfortuautely the same is true for any Class 1 mbem - which includes such notables as te US Robotics Courier HST and Sportster.

Although not an ideal situation, the mablems surrounding Class 1 modems ure been spotted and are being addressed. 4s a result, keep a close eye on Amiga -ulates for a promised upgrade which tould enable class 1 modems to use the athoare.
Not being a comms fanatic, the prospect of reviewing TrapFax didn't exactly fill me wth unbrided excitement. However much Dsurprise the whole process was - dare I -sy it - quite enjoyable.

## CREATION

After kicking up the optional hard disk intall and spending a few minutes with the excellent accompanying manual I was mady to send my first creation across the acros of carpet between me and the $A C$ fax machine.

The first order of business is to set up the IFaxPrefs which specify your name and number, initialise the modem and define the source and target directories for incomng and outgoing faxes.

It's at this point where I thought things ould get messy with initialisation strings, Buad rates and all the other things which make comms the altimate anorak pastime.
However in leeping with traation the whole thing is blissfally simple and only took a few seconds to set up. Aside from this, the only other job is to select "fax" as the preferred printer driver.

As you'd expect, the aforementioned triver comes as part of the package and is used to convert the cutput of any program into a format which can be sent via the modem. The only critesion is that the program must have access to the preferences printer driver.

To make switching between your printer and fax driver as simple as possible, a small
$3 x^{2}+2, \quad$ As far as the source
utility automatically switches the two drivers for you, so there's no need for any manual labour whatsoever. And better still, multiple serial boards are also supported, so you won't even have to switch cables. Intuitive design at its best...
 $\rightarrow-1+\frac{m}{2} /{ }^{2}$. there's no difference
 TrapFax is capable of excellent
text and graphics transmission between the two drivers, but instead of popping out on paper the file is converted and then redirected to the outgoing fax drawer.

When the printing process is complete you're automatically switched back to Workbench at which point a small requester appears asking where your creation should be sent, or if it should be kept aside for later use.

From the same requester you're also given access to the phone book. It's also possible to specify when the fax should be sent and how long the software should attempt to transmit - thereby allowing for any errors or busy lines to be retried.

Obviously the real attraction of timed transmission is its money-saving potential.

If you're making long distance calls you can specify that the fax is sent at the cheapest possible time. Assuming you've chosen the appropriate
estination you're returned to the main destination you're returned to the main window where the fax is sent or stored. Better still, TrapFax offers the ability to send the same fax to innumerable destinations.

All that's required is a few extra trips to the phone book, or alternatively you can the phone book, or alternatively you can
add new numbers directly. When all your destinations are safely installed in the recipdestinations are safely installed in the recip-
ients list a click on OK button kicks the process into life.

## PILE UP

After successful transmission the original fax can either be kept or deleted depending on preference. If it's kept the original file is simply moved from the outgoing into the sent drawer while incoming faxes pile up in a drawer of the same name.

If you've had a heavy faxing session in the early hours you can check out who got what, if not, why not, and when, with a quick glance at the TrapFax.log over breakfast. Prior to or even after transmission you can view you creations or incoming faxes ossible time. All that's required is a few extra trips to

# trappings 

Paul Austin examines TrapFax, a revolutionary software package that could add that yuppie touch to your modem
via another utility which pops up with an Applcon allowing a variety of scaled views of any fax either received or sent.

If you need hard copy the TFaxView utility also supports printing of both graphics and text - which of course means you have to swap drivers.

The only area in which TrapFax falls down is faults. With the exception of sending the same fax twice on one occasion, it appears faultless.

Of course the restriction to Class 2 modem only will limit its appeal initially, but come the upgrade TrapFax could well become an essential for any modem owner.

Ease of use 10
Implementation 6
Value for money 8 Overall 8
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...you couldn't do much better than taking a look through the sets offered by E.M.C.
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"The Top Desktop Publishing Typeface Award For 1992"
Pat McDonald from Amiga Format in issue January 1992 said
"The best person to talk to about fonts, in the UK at any rate is Errol at E.M.C ${ }^{\prime \prime}$
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0ver the last few years the Amiga has become the machine to beat for ray tracing and 3D modelling in general. Alas with its increasing success have come a vast array of modelling formats - all with their own individual approaches to the subject.

Unfortunately with their individual successes, each program becomes marooned on its own little 3D island. As a result it's been difficult - if not impossible - to share models successfully. And as for sharing the best modelling elements of each, forget it.

With such restrictions, upgrading from one package to another has involved some torturous decision making. Should I throw away all that hard work and start afresh, or stick with my existing outdated software? What a nightmare.

To be fair some, packages do make an effort to load other formats but these are few and far between, and of course software companies have a vested interest and tend to avoid contact with direct competition like the plague. For example Imagine2 will load Turbo Silver and older versions of Imagine but nothing else.

## IMPORTS

Due to user pressure some of the latest programs such as Imagine 2.9 and Real 3D v2 offer support for DXF - a format supported by the majority of CĄD packages.

This has its uses for corporate logos, and architectural fly-throughs but DXF imports are notoriously tricky and often requiring as much editing time as it would to start from scratch.

To be honest the problems associated with model conversion hasn't gone unnoticed by third-party developers. As a consequence there are a reasonable variety of conversion programs - which again are usually tied to a particular product or concentrate on font conversion rather than model sharing.

Even so there has been one notable exception in the form of Pixel 3D Professional. Costing around $£ 250$ it ranks as perhaps the most expensive ray tracing software peripheral in the business.

Unfortunately even this pricey program has some fairly serious limitations, most annoying of which is faulty conversion of complex objects.

Although the package can convert between 14 different formats they're only really useful when used on simple or indi-


## From DEM file to Lightwave object. Planetary scenes and animation are now simpler than ever before thanks to InterChange

vidual sub-objects. To be fair Pixel 3D Pro is designed to be more than just a conversion utility. In fact features such as 2D extrusion and point editing are all part of the overall system. As a result the program excels at 2 D to 3 D conversion and subsequent point tidying, but for straight conversion it still leaves an awful lot to be desired.

Enter the Syndesis Corporation with InterChange Plus, the conversion program and utilities suite we've all been waiting for. Now just to save time I'll become completely over excited early-on and return to the review in a few paragraphs.

Being a dyed-in-the-wool modelling maniac the prospect to free-ish access to a
limitless supply of models from both the Amiga and PC is quite simply manna from heaven. And of course any of your own classic creations can now live again within new productions.

As for conversion quality the results are quite literally astonishing. After extensive testing the program barely put a polygon out of place. After my initial amazement at converting a selection of models complete with their correct hierarchical structure and including colouring, transparency, diffusion and specularity - where appropriate.

Even subtle aspects such as Imagine subgroups were spotted retaining their own colours, attributes and surfaces during con-

## Syndesis 3D-ROM

In addition to InterChange Plus, Syndesis have also released a CD-ROM packed with over 500 models ranging in quality from the unspeakably crap to astonishingly impressive - with somewhat fewer of the latter than the former.

Perhaps the best description of the CD comes from the packaging itself which reads: "A spectacular demonstration of a new 3D translation technology called InterChange Plus."

The word to concentrate on here is demonstration. Although there are examples from professional model makers the vast majority are PD examples which have been simply copied onto the CD and translated into the various formats in order to demonstrate the power of InterChange Plus. As a demo it's certainly pretty impressive with all 500 models offered in each of the following formats 3D Studio, AutoCad, WaveFront, Lightwave
and Imagine. Quite why Syndesis are asking the same price for the CD as InterChange Plus - given that the vast majority are PD models - is a mystery - not the mention mildly annoying.

To be fair examples of the modelling prowess of InterChange aren't the only things on offer. In fact a collection of over 400 mirror tiled texture maps also come as part and parcel of the CD ideal for modelling and general multimedia applications.

Thanks to aforementioned textures the 3D-ROM does manage to claw back a reasonable degree of value for money, but to be honest $\$ 199$ for what is essentially other peoples work combined with a selection of texture maps is just a little too much.

However, for the professional videographer it does make a useful reference library - ideal for the occasional prop to add that finishing touch to a near perfect scene.
version. Obviously texture maps aren t integral part of the model and need to replaced later on.

However for the ultimate test I thoop we needed something big, and they $d=$ come much bigger than a Vista/Scenet Animator DEM file.

Unfortunately a complete map of $\begin{aligned} & \text { a } \\ & \text { and }\end{aligned}$ Grand Canyon proved just too big for $=$ machine, however after a little tinkerim smaller region did the job.

Admittedly the first few attempts throw up the odd glitch as assorted poly=a appeared to poke out of what should 3 been a smooth surface.

## FINE TUNING

Fortunately each InterChance conve a separate module with its own intemal erence requester allowing you to fine the conversion process to suite the $\begin{aligned} \\ \text { the }\end{aligned}$ software.

After doing exactly that, the afore tioned DEM converted perfectly and lat directly into both Imagine and Lightre without a single glitch. This is even $=$ impressive considering the new impor sisted of over 16,000 points and 37 polygons.

Admittedly the finished Lightwave it came to a rather staggering $535,832 \mathrm{k}-3$ be honest the end result was worth byte. As well as far superior conver InterChange also has the added bores incredible speed. In the past a Pixel Pno
erion usually involved a very long coffee mak, if not a three course meal -Change on the other hand is astonishnetr quick and will convert a fairly complex model in a matter of seconds. Bliss absolute nise
Now we've covered the end results it's worth mentioning exactly how they were whieved. Basically you have two options. $3 x$ can either fire up the main program and tauble click on the required conversion modules individually or go for the direct mproach and double click on ICP Start which automatically loads the entire suite of anverters.

Regardless of the approach the end result mains the same with a small requester opping-up on Workbench allowing selec-


Simple but effective, just select your object, click on a converter and It's alf over in a matter of matter of

## The bottom line

Basically InterChange Plus is an essential tool for any serious 3D enthusiast while the 3D-ROM is reasonable - if you're either a cut and paste ray tracer or a professional who can envisagc recouping their investment courtesy of improved productivity.
However be warned, although many of the models are impressive the majority are fairly run of the mill and could probably be duplicated by an experience user in a matter of a few minutes.
son and saving of the original and concerted model along with the required onverter.
Aside from file selection and saving, there's little else to do apart from defining whether you want backup files or wish to ancatenate file names - thereby keeping a story of the model's source software in the fim of an add-on to the existing file name ather than a direct replacement.

For the vast majority of conversions that's all you'll need to do. Simply select the file, define the target directory and convert. However if problems do arise you can repeat the process but prior to conversion a double click on the chosen converter will allow you to do the necessary fine tuning.

Fortunately the accompanying manual is both friendly and thorough so any adjustments shouldn't be too painful. However in certain cases opening a modules requester is essential - as not all are dedicated entirely to conversion.

It's in this area where InterChange modules enjoy at least some of the added utility features found within Pixel 3D Pro. For example one of the most impressive utility

## Supported formats

Lightwave objects and scenes Imagine
Turbo Silver 2.0 and 3.0
VideoScape 1.0 and 2.0
Sculpt 3D/4D scene and script PAGErender
Atari ST CAD-3D
Professional Draw, Aegis Draw ImageMaster ISHAPEs
Vista DEM digital elevation maps 3D Studio
Wavefront.obj AutoCAD DFX converters
modules adds font conversion the InterChange repertoire - via the InterFont converter.

In addition to the converter you also receive an InterFont Designer along with 23 InterFonts designed by Syndesis plus another 48 licensed from ARock Computer Systems. These fonts can be loaded,


A couple of classic objects from Sculpt converted first time without a single pixel out of place
extruded and converted to into the DTP or 3D format of your choice via the aforementioned InterFont module. It will even add justification, centring, bold and italic along with user defined surface attributes.

Another utility entitled Surface Converter allows the attributes of objects to be loaded and converted to InterChange format for easier attribute matching between formats.

If statistics are more to your taste another module allows a text file to be generated describing the structure point/edges/faces, colour and its surface attributes of any object.

As for model manipulation you're provided with a reduce points, scale and snap to grid each of which employ the same modular approach with their own pop-up requesters.

All this talk of conversion utilities and requesters may well give the impression complexity. However rest assured that 99 per cent of conversions require no additional editing whatsoever and are usually complete in a matter of seconds.

As you've probably guessed I'm pretty impressed with InterChange Plus and for the serious ray tracing community it's definitely a must have product, which will not only save hours - if not days - of modelling time but also open a whole world of perfectly imported models from all the major CAD and Modelling systems on both the Amiga and PC.

A famous face from
Lightwave now avallable
for use within Imagine.
Again imported first time without a single error

Product: InterChange Plus
Supplier: Syndesis Corporation
Phone: 01014146745200 Price: 1999
Ease of use: 10
Implementation: 10 Value tor money: $\mathbf{8}$ Overall: 9

Product: Syndesis 3D-Rom Supplier: Syndesis Corporation

Phone: 01014146745200 Price: $\$ 199$
Ease of use: 10
Implementation: 10 Value for money: 8 Overall: 9


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## ■PD and SHAREWARE

Anew year and a fresh crop of games and utilities to wade through. If it's been a new year's resolution to buy more software then there's no better place to start than here in the Public Sector. Keep the titles rolling in, no matter how bizarre, strange and weird - I want to see them...


Go carefully round the corners - suspense and atmosphere all play a part in Black Dawn...

## Black Dawn

## Programmed by: Andrew Campbell

Available from: Pathfinder PD Disk No. PG219

Black Dawn is one of those PD games that lands inconspicuously on my desk among a pile of others with no fancy wrapping or glittery packaging but on slipping the disk in to the drive and booting up, it blows the reviewer away with its sheer professionalism and playability.

Set on a large spaceship... contact has been lost... drifted in space for centuries... recently turned up on deep space radar and so on. The player must embark on this three-mission demo to work down through the craft, accomplishing various tasks and blowing away the aliens that infest it.

This is Alien Breed meets Dungeon Master as you creep down the twisted corridors with baited breath dreading what might lurk around the next comer. Along the way, differing suits of armour and weapons can be bought to top up the continually ebbing supplies.

There are plenty of surprises in store such as large metallic balls that lie in the corridors of the ship that need to be pushed out of the way but carefully so as not to block an exit.

The graphics are a high standard with varying species, from tentacle creatures to green dinosaur heads, that cause untold damage. The sound as well is very effective if a little sparse - start shooting something off in the distance and the following hit registers quietly but as the enemy closes in, the louder the sound of impact becomes.

This must be one of the only PD titles that I've played all the way through to the end. Admittedly there are only three levels to complete but this is still a worthy buy.

If Andrew Campbell intends to add several more missions with varying objectives, more weapons and creatures to the finished version, I don't see why he should have any problem selling this on to a company to be released as a commercial game. Excellent.

## Magic Workbench

## Programmed by: Martin Huttenloher

Available from: Graphic F/X Disk No UT 132

Have you ever noticed how bland the Amiga Workbench looks - single tone colours in the background, dull icons in the foreground and how in desperate need of a facelift?

Magic Workbench is the plastic surgeon of utilities which enables the user to strip away the old and install a new, all improved and -prettier face for your machine.

Coming on a single disk, it offers a multitude of 40 different backgrounds for Workbench 3 owners (or one for WB2 and lower), a fresh set of attractive-to-the eye icons and fonts, a sample inserter (change those wee little noises your Commodore makes) and an opportunity to alter the pointer and busy icon through a limited art package.

All that needs to be done is a simple installation onto your hard drive and then select the rest. The graphics on offer are of a very high standard and tasteful (if a little too Laura Ashley in places).

The only negative point in the whole program is the lack of different types of pointers and sound $\mathrm{F} / \mathrm{X}$ - these need to be provided by yourself.

You can install it on your floppies but make a back up of any disks that are being altered for safety's sake. Magic Workbench is an great buy and offers a great deal for such a small price. Your Amiga deserves this.

## Moose Drive

Programmed by: Graham Dean
Available from: Graham Dean
Racing games seem to be in vogue at the moment with Road to Hell gracing our screens last month now to be followed by an

## Adam Phillips looks at the latest PD releases from all over this snowswept land

 PUBLIC

Out with the old and in with the new all improved sllicker Magic
equally solid racer, Moose Drive
Viewed in from above with a slight 3D tilt, this is a hectic race round a selection of ten tracks to become the ultimate moose driver (why? I don't know, I only work here). Two other cars join the player on the track to add to the competition and steadily improve both performance and speed wise as the races count up.

If by the second race though, you begin to feel a little cheated by the sheer Mansell handling of the opposition, don't give up too quickly - a hurried rummage through your race earnings to date will hopefully yield an upgrade to a better engine, batteries or tyres.

One of the most impressive features of


Why call a game Moose Drive? Answers on a postcard...
this package is the large number of van ables that can be changed by the playe Anything from car colour to the compettions' performance may be changed to suil your tastes.

While hurtling at a breathtaking rate

## Fairlight 242

Produced by: Virtual Dreams
Availhble from: Mega Software
All the way from sunny Finland comes computer pop video with music by nan other than Papa Smurt (?). Coming a strong on one disk, Fairlight uses ${ }^{6}$ tised video of somebody walking dor a street intercut with various Nike-l blip captions that flash up and tell pron to live life to the full.

Even though it all becomes ratt repetitive after a while - if you tor away the fancy chrome and green fil you'd be left with some pretty borth camera work of a spotty teenager me ing into a magazine shop - it's impre sive that it's all been done on B Amiga.

It's well taking a look if you wart see what stage the Finnish music sern has reached and to show what vism effects the continually surprisi. Commodore machine can pull off.

leseth the rough and ready exterior beats the heart of a flendish beat-'em-up
mand the corners (and you really do in the later stages), it's possible to smash the ar up which then needs to be driven to the nearest pit stop for a service.

This kind of attention to detail lifts Moose Drive from the usual mundane athairs into a smooth, slick little number with "dinky" graphics and quirky sound tat can hold you on the edge of the seat when that damned finishing line always seems to be obstructed by the opponent's ar.

## Mad Fighters A1200

## Programmed by: Kwok Man

Available from: Roberta Smith DTP Disk No RGA034

One of the greatest gaming phenomena of the last three years has been the emergence of the fighting genre that has
become stronger than the platform following.

Streetfighter 2 and Mortal Kombat are the two main arcade monsters that eat school-kids' cash for breakfast, lunch and dinner. The Amiga has already had the delights of huge disk accessing conversions courtesy of US Gold and soon we can look forward to the delights of Mortal Kombat, hopefully with fully digitised blood, guts, gore, colon and intestines.

On the home front, Team 17 have been bashing away at the best beat-'em-up to date on the Commodore, Body Blows, and its follow up, Galactic Body Blows.

But what of the public domain and its offerings? As far as I can tell, they're a little thin on the ground. MadFighters will hopefully re-address this balance - a huge street war/competition with over 16 different characters in the full version, this

## game is an action fest.

On booting up, the presentation of the whole thing may well put you off - they are very rough round the edges. Blocky sprites, clashing colour schemes and horribly basic looking front end don't help to encourage confidence in the game.
Choose from a wealth of options exactly how you want to fight - speed, difficult, knockout tournament or arcade mode among others - and then indulge yourself in some absolute mayhem as your chosen character is dumped against an enemy whose sole intention is to beat the living daylights out of you.

There are various moves such as throws and kicks but also included are a selection of the special actions. These range from a hurricane-style kick as seen in Streetfighter II, where the character whirls round in the air with legs kicking in all directions, to fireballs of enormous size.
This is all frantic, exciting action with good use of sound including digitised voices and crunching impact noises. While I have my doubts about the collision detection and the amount of skill needed to win, these questions largely remain unanswered because for one this is only a demo and two, I was having too
much fun at the time. Apparently, the final version, costing $£ 6$, includes 16 different characters with three or four different special moves each, 16 different backdrops (only four can be chosen from in this version) and nine difficulty levels.
If you're still uncertain about

## Calling all PD libraries...

..and individuals with anything remotely worth my while having a peek at. If you want something released as PD, or you're a library with stacks of hot new stuff that you haven't seen reviewed in these pages yet, why not drop me a line with a copy, full documentation and everything clearly labelled? I promise II at least look at your work.

From music to education, business to utilities - anything you feel deserved your shoving onto a floppy disk, lemme at it and I'll do the rest. Address?

Adam Phillips, PD submissions, Amiga Computing Europa House, Adlington Park, Macclesfield SK10 4NP

MadFighters because of the dodgy looking screenshot, then lay your hands on the demonstration disk and give it a try - if you're a fight fest fan, this could be what you're looking for.

## Jigsaw!

## Programmed by:

 Frank ArnotAvailable from: Frank Arnot

Let's make one thing a little clear, I am not a fan of jigsaw puzzles - I've always had a problem with seeing little point in putting a picture together with 500 different pieces. Granted there is a modicum of satisfaction as the final piece slips into place but that's about it.

Well, imagine my Viz-like surprise when I booted this little title up only to be hooked on it for quite some time.

Set on a grid made up of 25 pieces, the player must reassemble a picture within the time limit. By selecting a piece, it can be rotated or moved around the board until the correct position is found.

The final image can be called up a certain amount of times for invaluable reference, as can a percentage indicator that tells how much of the puzzle is successfully in place.

During this hectic enough activity, matters are made complex by the advances of the Jitterbugs, a computer-controlled selection of Lemming-like creatures that change and move the pieces around.

Fortunately, it is possible to shoot the little suckers as they come on-screen, but once on the board itself, they have various powers to make your life a misery, from rearranging a single line to laying down a block piece. Jigsaw is a solid, fun and

## Grand Prix Manager 1993 Season

Programmed by: Ave Avid
Available from: Various
After the hands-on experience of Moose Drive, it was a pleasant switch to settle in the managerial and not the driver's seat in this Grand Prix management game.

Based in the office of a struggling businessman trying to make a break into the big league, between one and four players can take part with the objective of winning the championships five times within five years.

From behind your desk, contracts for drivers are negotiated, cars are bought, repairs made, weather checked, and other wheelings and dealings done.

Some of this business is aided by the large-chested, miniskirted secretary who wobbles her bits showing that, even in these times, some men can't resist a cheap "thrill/laff".

Once you've selected the people you want in your team, it's out for the big day to watch the races. These are viewed from above the finishing line where each lap is shown as the racers power past.

Intercut between this are listings of the positions held on the track, with events such as crashes being displayed along the bottom.

Unfortunately, the racing section takes up most of your time


Race cars and make a bundle of wedge in Grand Prix Manager
and as the cars whizz around 26 laps of a course, boredom settles in as you begin to wish there was a skip button.

The game seems to be a reasonable attempt at a racing business simulation but lacks any real variety to hold the attention Might be worth waiting for the next season.
addictive game that works smoothly and its later levels can be accessed via the use of a password system. Recommended.

## Messerschmitt Bf 109

Produced by: Greendell Technologies<br>Available from: Various Disk No (CLR) -CLE33

Decent educational software has always been thin on the ground with the prefer-


Solve the puzzle and shoot the lemmingWike Jitterbugs
ence being fairly placed on the games side of computing. Most "edutainment" is simplistic and invariably rather dull when compared to fun to be had with the likes of Alien Breed 2 and Cannon Fodder.

Messerschmitt is a multimedia-esque package which while not the ultimate in teaching software gives the user a full low-down on the plane and its role in history via an interesting and well thoughtout format.

It's possible through a series of menus, icons and images to find out about the engine, weapons, cockpit and nearly anything else you could possibly want to know.

The system of user interaction works well - for example, when looking in the cockpit, simply press on the instrument you don't recognise and up pops the name of the selected item. For those interested in


Learn about how World War II fighter planes worked and fought...
that old classic, the Spitfire, there is also a disk set available based on Blighty's aircraft, and as with the German equivalent it is highly detailed and recommended for adults and children alike with an avid interest in war planes.

## Contact addresses

Frank Arnot
21 Sharp's Lane, Dundee DD2 3EU
( $£ 5$ for full version)
Graham Dean
14 Fielding Avenue, Poynton SK12 1YX
(Cheques payable to the above name $£ 5$ for full version)

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We've seen a bit of an explosion in EGS activity of late. The retargetable graphics system (RTG) developed by Viona Systems and adopted by GVP for use on Spectrum has already been used by the GVP EGS $110 / 24$, Peggy FMV card, and Piccolo graphics board, and has gradually earned recognition as an alternative display system.

Spectrum 28/24 is a newly designed low cost Zorro II or III card and fits in any spare slot, communicating with the CPU via the usual Amiga data channels rather than the blistering direct access its predecessor enjoyed when talking to the Combo's 32 -bit local bus. The on-board blitter is a 28 MHz chip, and though nowhere near as fast as its pricey predecessor, it can still move along a fair old lick.

Users for cards such as this are many
and varied, not least among graphic artists and DTP specialists, and for improved productivity the speed at which Spectrum handles images is ideal.

Hardware scrolling through a large 24bit image in smooth easy stages can be misleadingly easy at first, but try the same trick with a Ham8 file in DPaint 4 if you need to be reminded how slow it can be.
As usual with EGS cards, the most annoying aspect of the whole package is installation and setting the thing up to talk to the rest of your system, particularly the monitor.

Spectrum has a wide range of available screen modes, up to $1600 \times 1,280$, but many of the higher resolution modes will only work on expensive 17 in multisync monitors with generous bandwidths.

The installation program offers a number of common display options to make life
a little easier, including the Commodore 1950, but there is no entry for the 1942 - a strange omission given that this is already the most popular Amiga hi-res monitor.

Choosing the 1950 setting works well enough; so as long as the user makes the correct guess, everything should be fine. If a common or garden bi-sync or SVGA monitor is used, the best that one can hope for from Spectrum is 24 -bit at a resolution of $800 \times 600$, and this can often be reduced to 256 colours if the monitor is less flexible. Most, though, should be capable of 24 -bit at $640 \times 480$, which is good enough on a 14 in monitor.

Signals from the Amiga's RGB port can be passed to the board then on to the monitor if required to give a pass-through capability such as offered by Piccolo, and the two monitor set-up is also available for those with a spare medium resolution mon-
itor to take the standard Amiga display.
On first booting-up, nothing will happe as the EGS screen mode has not been setit selected, but setting this is a very simp task. The latest EGS libraries (v6.15 va supplied with our board) are much mars reliable than some of their hapless anos tors, and make EGS screen modes availd through the normal Prefs screen mas requester.

## DISPLAY

Just open the Workbench Prefs drave as normal and use the screen mode pror gram to choose between a list of EGS dis play modes which should be available.

This means one can experiment unti suitable mode is found before saving $t$ settings, after which the Amiga will boet Workbench into an EGS mode using up 1 256 colours. The unfortunate side effect

GVP's Spectrum 28/24 graphics card is the latest board to offer EGS and its own brand of extras. Stevie Kennedy checks out the other end of the rainbow



Programs such as Final Writer work much faster and smoother using an EGS Workbench mode
IEI Dock can be used as a sort of EGS desktop for all the supplied utilities and prefs programs

# col 

tis approach is that although EGS is now more system friendly, only programs which an open as a Workbench screen will benefit fom the EGS display modes.
PageStream, Wordworth, and many ther productivity packages will open on Workbench, but not all will and prospective EGS users are advised to check to ensure tat their favourite software is suitable.
When an EGS Workbench is running, any program opening a custom screen will do so in the background and the user will have to ase Amiga-N or M to switch to the new screen, which will not pop up in front of Workbench as normal. This can be a pain if the user was looking forward to using, say, Inagine 2.0 on the Spectrum display.
Older EGS emulation allowed for custom screens to be re-directed to EGS, but as these programs usually suffered from screen refresh problems the new system is more reliable if a little less flexible.
Flicking from EGS to other screens using the Amiga-M/N hotkey is easy enough, and EGS screens themselves can be pushed to the front and back using the depth gadgets, so no screen should be difficult to access.
In use, the first impression one gets of EGS, especially Workbench emulation, is that it is very smooth. Normally, a 256 colour Workbench will be tediously slow even on an $\mathrm{A} 4000 / 040$, but such a screen on the Spectrum display is easily as fast in operation as the normal 16 -colour mode.

Opening a DTP package in $800 \times 600$ or greater using the 256 -colour mode gives the user a hefty speed boost, particularly when scrolling through colour documents containing pictures. Spectrum's speedy operation and dedicated VRAM ensures that screen update is fast and smooth.
Owners of older Amigas will find less to rejoice about, as the way in which

Workbench emulation takes place means that they still cannot open screens with more than 16 colours. Workbench revisions prior to 3.0 simply don't use more colour and EGS can't force them to.

However, the board's higher resolution screen modes are still available, as is the EGS display proper, on which any package designed to use the EGS libraries will open. This is a true 24 -bit display (though it can be set to any depth the user wishes), and is used by the bundled paint package, EGS Paint.

Most of the huge array of libraries supplied on the EGS disks are used solely by the EGS display, and they include libraries for most common windows, gadgets, and requesters. This makes all EGS software very similar in appearance and operation, thus promoting more consistent design.

## TOOLS

As usual, Spectrum is awash with utilities and support programs for use with EGS, including a battery of prefs programs and a collection of more or less useful tools. There's even a 24 -bit version of Tetris at which I was able to demonstrate that more colours don't make good Tetris players.
Of most consem to the new user will be the preferences which control everything from the screen mode used when an EGS package is run to the fonts used in windows and gadgets.

There are settings for the mouse pointer, screen offset, and more or less everything normally associated with Workbench prefs, so it isn't much of a job to set the screen to suit one's tastes.

Extra programs include the ubiquitous clock and a handy 24 -bit plotter program which will produce textured surfaces, not unlike rippling velvet, from any mathemati-
cal function. The 24 -bit screen blanker is a particular show-stopper, and offers a few very odd but colourful patterns and animated effects.
One tool which would have given Spectrum an edge would have been a 24 -bit animation previewer similar to the Retina board's MakeRACE utility. Such programs, though incapable of full screen video speed, can give the artist an invaluable 24 -bit preview of any animation, and with its on board blitter and 2 Mb of VRAM, Spectrum should be able to display double-buffered animations at about 15 frames per second.
This would of course be unsuitable for full-blown video work, but given that the board's output can be passed to an RGB-tovideo encoder, and there is such a potential for fast 24 -bit work, an animation or slideshow program would have been a big bonus for videographers.

As it stands, Spectrum $24 / 28$ is a stable, high quality display card with solid EGS software of the latest version, better Workbench emulation than the v 5 libraries we've seen up until now, and a burst of speed which can make 24-bit work easier than painting in 16 colours.

The EGS standard might not be the last word in RTG (Commodore have yet to release their own) but at the moment it is the best environment for alternative displays.
When it is aided by hardware which offers this speed for $£ 399$, the combination, though far from perfect, is a huge improvement on the slower AGA chip set and knocks spots off ECS displays.

Any EGS system currently available could say the same, but Spectrum's speed gives it an edge over everything other than Piccolo.

## Paint not perfect

EGS Paint, the 24 -bit art package bundled free with this board, is an excellent complementary program, but it still has a way to go to catch up with the likes of TVPaint EGS and falls a little short of the Pico Painter package supplied with Piccolo.

The standard drawing tools are well catered for and there is an excellent bior quad-view setting so that users can work on up to four different parts of a large image, but the airbrush tool leaves a lot to be desired and there is no alpha channel. Working in 24 -bit without the benefit of transparency control can be a little limiting to say the least.

Brush manipulation is at least good and there is support for all fonts, so the picture isn't all bad. In addition, EGS Paint works incredibly smoothly, and simply by using the scroll bars on the image window one can scroll through a 1.5 Mb 24 -bit image as if it were nothing - a testament to the power of Spectrum's blitter and its fast VRAM.

## BACKGROUND

Stencils are also well implemented, and any brush can be used to mask the background image, so the package does have its uses. A good gradient fill tool is one thing EGS Paint can boast which Pico Painter lacks, and for 24 -bit backdrops it is an essential effect.

A more advanced tool is the magic wand which will mark out an area or marquee whose boundaries are set by the user depending on colour tolerance. Using Magic wand all sorts of tricks can be utilised, including very selective fills, and its inclusion is a major boost to the package's flexibility.

The program's best feature, though, has to be its Pantograph tool, a strangely named beast which copies pixels from one part of an image to another area or a different image window using the current drawing tool.

This offers a great deal of flexibility and it is possible using Pantograph and the airbrush, for example, to create feathered brushes in another image, then paste them back into the original.


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Ah, the only problem being that you lave no printer at the moment... that's seat on the buying list but for the time Being, using your friend's Amiga printer et up over the other side of town will have to do.

The idea of having to take the whole 1200 across Bursley seems a little cumbersome especially by bus so the next best Aing appears to be to copy the whole dam file across to floppy disk and take that across on the No 36.

The only obstacle lying in the way of leeling a wad of crisp, shiny paper covened with your words is the lack of a formatted disk. Or more to the point, what is a formatted disk anyway?

## BLANK

When you buy a disk from a shop, it is usually completely blank and therefore can be used on any machine from a Commodore to a PC or Macintosh. In this state, nothing can be saved onto it simply because the micro won't be able to read it.

To be specifically set up to run on your Amiga, the diskette needs to be formatted by the computer so that it becomes recognisable to your 1200 which in turn means that files can then be loaded and saved onto the disk.

To achieve this, take your recently purchased floppy and take a look at the underside. In the top left corner, you'll see a black tab that can be moved up and down. This alters the protection of the disk - when it doesn't cover the hole, the disk cannot be written on to by the computer (write protected) and when over the hole, it is write enabled.

It's much like an audio cassette, but


| Icons Tools |  |
| :---: | :---: |
| Open | 40 |
| Copy | A1C |
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| Infornation... | AI |
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| Leave Out | AL |
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Click on the disk icon once to highlight it...




Select Format Disk

adjustable. Flick the tab over the hole and slip it into the switched on, Workbench booted 1200 floppy drive. An icon in the shape of a disk will appear displaying a series of question marks with the words DF0, PC0 or "DF0: NDOS"

The first two can appear simultaneously giving the user the option to select either a PC (PC0) or an Amiga-formatted disk (DF0). Don't worry about the PC option for now - from here you're ready to begin the formatting process.

Click on the DF0 disk icon once with the left-hand mouse button to highlight it, then press and hold down the right-hand one and you'll notice that the menu bar at the top of the screen displays various words with in it.

Move the pointer to this bar, holding the button all the while, and go over to

The final warning
the word Icons. This will produce a pull down menu of options.

Near the bottom, you'll notice Format Disks. Move the pointer over to it and it'll become highlighted. Release the right-hand button and the option will then be selected.

You'll be presented with a Format Selection window with various options. Current information gives you a rundown of the amount of memory and the name of the disk inserted in the floppy drive. It's possible to format your hard drive from here as well but leave that well alone for now.

## FAST FILE

Look down the list and you'll see two very useful functions that can be clicked on or off. For an extra 40 k of floppy memory which allows more data to be saved onto the disk, select the fast file system.

This feature is very useful but will only operate on Workbench 2 and above so check if you're going to have to use someone else's Amiga at some stage that they have the version required. Your 1200 comes with Workbench 3 , the latest edition.

Directory cacheing speeds up the opening of drawers, file requestings and


The whole process takes a couple of minutes...
listings which is very useful for hunting through many files on one disk because there's less waiting involved. Unfortunately, it can only be run on v3 of Workbench so again check if you are going to be using it on somebody else's machine.

After selecting what you want, choose either Format or Quick format. Format erases everything on the disk which is constructed out of a series of cylinders that are numbered from 0 through to 79 . The computer systematically goes through each one, wiping it of all information.

Quick format is used on disks that have already been correctly formatted for the Amiga and is simply there for the user to quickly set up a fresh floppy for files to be transferred on to by making the previous information stored unwrite protected and undetectable by the computer.

For your initial purposes, click on format and you'll be presented with a format request window which will then ask if you're absolutely sure that you want to wipe the current volume (disk).

Pressing on format produces a percentage window which slowly fills in as the disk is formatted. This can be stopped at any point by clicking on, yes, you've guessed it, stop.
Once the micro has finished, the screen will revert back to the Workbench displaying the disk with it's new name, ready to be used at your
leisure.

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## Premier Manager 2

This is the latest football management sim from Gremlin. Following on from its predecessor, Premier Manager 2 takes the whole football management scenario one stage further, and although more complex than the first version, loses none of the addictive appeal which made it the success it was.



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SECONDS AWAY, IT'S...


## Darkmere • Darkstone • Universe • Heimdall 2 Genesia - Robinson's Requiem

## Core-nucopia!



Yes indeed, cornucopia is the word beccuse Core Design have gol a wealh of releases coming your woy. Following the success of Bubba ' $n$ ' Stix, the Derby based soffware house have got a further four tittes to be released before April.
First up is the long-awaited Darkmere which has been in development longer than the new Stone Roses album. In this 3D isometric RPG you ploy the role of Ebryn.
Ebyn's father, Gildom, mony years ogo went to help the people of Darkmere who were being terrorised. The only problem is hat Gildom is an Elf and it is and I quote the Elven Council "Tnot cur place to interfere with offtoirs of humans"
Gildom revolted against the Council and took
his sword and magic crystal to complete his quest of soving the humans. Gildorm returned to the villoge and stoyed there and became old and weok. His son, Ebryn, grew strong and became a brave fighter. Evil was also on the up and juss like his tather before him, Ebyyn decides to become heir to the throne by ridding Darkmere of evil.
Sounds pretty damn good and it should be on the shelves as you read this, but expect a foll review next month. With all the development problems a strange occurrence has arisen. The sequel to Darkmere entitled Darkstone will be availoble to buy in February, just a monht later than the original!

Darkstone will be a top-down Medieval RPG adventure and if if's anything like what we've seen of Darkmere it should be pretly good.
Coming to your monitor screen in February is Universe, a graphic adventure very similar in style to Curse of Enchantio. Universe follows a similar format to Curse in that it uses a point and dick, icon-driven odventure game, but this time with added text.

The story revolves around the plight of an ordinary lod who finds himself drogged into another dimension. After tompering with his eccentric Uncle's mechanical invention, the "Virtual Dimension Inducer", our young hero arrives in a
 begins.

The game features $3 D$ rendered animations and arcade style sequences os well as an innovafive S.P.A.C. 256 colour system which runs on all Amiga formats induding the A500.

Err, I don't octually know exoctly what it is, but apporently it is able to display Universe's digitised hand pointed scenes and their detailed, mood-setting background animations to full
effect. Universe looks damn sexy and should ploy like a dream and hopefully wéll a preview or review in the next issue.
Core Design's last release in the first quarter of ' 94 will be Heimdall 2 , the emphatic sequel to the highly praised Nordic RPG adventure. We'll no doubt be sneaking down to Derby to hove a peek of it very scon, so keep reoding Gamer for further developments.

## It can't dance!



Genesio. A disastrous spelling mistake could mean that Phil Collins and his friends are about to be immortalised in pixels. Thank God I have spelt it right and it is in fact a game from Mindscape that's been heralded as the new Civilization. In the world of Genesia you play the part of a leader who owns a small land. You are also a powercrazed fool and your land is just for too small for your ambitions.

You must expand your land and populace in tune with nature, paying attention to the climate and managing resources such as water and timber (hey, it's eco-friendly. Right on!).
At the same time you are dependent on the skills of your people. Are they a race of hunters or farmers; do you have architects and inventors among them? Are your people happy or are they insular, miserable and

## untriendy?

Questions such as this will need to be answered if you are to get anywhere in Genesio. These decisions and consequences will effect the game so you will have to work, invent, defend, build, fight, trade, destroy and conquer to stoy of the top.
Genesio is an overwhelming combinction of the best in strotegy and God games and features five different worlds each requiring different strotegies and ploy styles to win.

The four seasons are graphically represent ed and have a reol.life effect on the game. Mindscope's latest offering features some highly detailed isometric grophics ond con-tex--linked sounds to create an intense

## atmosphere.

The price is still yet to be confirmed, but Genesio will arrive in the early part of 1994.


## I will survive!

Simarils, the company that brought you the ihar series of adventures, have returned with tiobinson's Requiem - is apparently the ultimate let of human endurance in an alien world.
You play government agent Robinson, sent in a reconnaissance mission to a mysterious and unknown planet. However, you soon discovar that the entire mission is a trap set by your swn government, who for their own reasons no anger want you around
Your ship is out of control and is being help-
have to amputate one of your own limbs in order to survive, then that is what you must do! '(Crikey! - Ed)

Along your travels you will meet many monsters and extra-terrestrials who can be used for food and clothing, from which the only draw back is the fact they will eat you.

Robinson's Requiem has a spectacular play area representing over 3 square miles and includes ten different sceneries such as under ground passages, lunar volcanoes and even a
lessly dragged to what is in fact an enormous prison an "astral Alcatraz" from which no-one has ever escaped.
You decide to bail out of your ship and land in the heart of dense and hostile jungle. Equipped only with a sur vival kit which contains many medicines and tools plus a micro-computer to keep you informed of your physiological condition.
The aim of the game is to escape and the name of the game is self-preservation. If you


That fantastic first ever shot of Ishar 3 graveyard The graphics are absolutely amaz ing and it looks like Robinson's Requiem could be that liftle bit special. You'll have to wait until March when it is released to find out, but we should have an indepth preview in the near future.

Silmarils are also on the verge of completing lshar 3 and as you can see from the screenshot it looks like more of the same, but, err, probably better. Ishar 3 is to be released in April, but we'll provide you with more informafion as soon as we get it.


## We are absolutely bulging with top quality game reviews this month. I'd begin reading them now if I were you!

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## Mortal Kombat

## morime the small screen

You've seen the adverts of the TV with that long-haired bloke shouting "Mooooortal Kombaaact" bocked up with loads of "hip" streetwise kids who are dancing and jumping to a hardcore dance tune.

Of course you have, this advertisement was for the Mega Drive and SNES versions and I have to hold my hands up and say that Mortal Kombat looked absolutely brilliant!

Those pesky console owners seem to alwoys go one better, but no longer because courtesy of Virgin and Probe Soffware (the team that converted Terminator 2 to the Amiga), Mortal Kombat is putting an appearance in on the Amigo. Oh yes!

As far as beat'-em-ups go the 16 -bit home computers have done relatively well with titles such as IK+, Body Blows, Body Blows Galoctic and even Street Fighter 2 - although that wasn't very good, but still a lot of punters out there bought it.

Everybody loves a great beat' em-up and I know the reason why. For one, when you're frustraled or angry you can't go up to someone in the street and smack them in the foce. Err well you can, but you'll get sent to prison on GBH charges.

Thus via today's game technology you can be transported into the body of a muscle. bound freak and kick the living daylights out of your opponents. This is perhaps even more satisfying when you're playing against a friend or enemy.

You actually become the fighter and sometimes it does actually feel as though you're getting your head kicked in, although it's more mental than physical obviously.

## DIFFERENT

The slight problem with beat-'em-ups is the foct that once you've seen one you've seen them all, because you are so limited to what you can do in them. This is where Mortal Kombat has the advantage of being slightly different.

Aport from being hyped to oblivion, Mortal Kombal is perhaps the bloodiest, most goriest fighting game that you're ever likely to see. For those well up on the console scene the you will know that the SNES version didn't have any blood in it whatsoever and the Mega Drive's bloodfest could only be occessed via a cheat.

The Amiga version, just like the arcade, get the full treatment with oodles of blood and
gore splattering all over the place. Yes, sick I know and irll probably turn us into a nation of serial killers, but Mortal Kombat is the bloodiest game I've ployed since Moonstone.
It's a tournament whereupon fighters are chosen from around and out of this world to scrap it out to the death. You have to choose between seven characters who all have distinct personolities and abilities.
In a sort of handy "thanks a lot Gamer" kinda way, all these characters details are displayed on this page. I scid seven before, but you will notice that there are actually nine characters in what we lovingly call a "box our".

You have to fight the other two at the end of the game after you've defeated the other characters. First you have to battle the monstrous Goro who has six arms and a very bad attitude and then to win you hove to take on the might of Shang Tsung.

As you may or may not know, to win a bout you have to deplete your opponent's energy bar to zero. The bouts are fought on a best-to-three basis and af the end of your second victory your defeated victim will stand swaying for a few seconds and Shang Tsung screams "Finish him!".

## FREE SHOT

You'll then get a free shot at them to complete your victory, but this gives you the chance to perform your lethal death move to make your fighting performance even better.

The death move involves all monner of grisly deaths and range from exploding heads to hearts being ripped out of bodies. Gory I know, but hey the "kids" love it, apparently.
Summing up, Mortal Kombat is one of the best beat-'em-ups that you can buy for the Amiga. It kicks seven shades out of the almost laughoble Street Fighter 2.

It will be compared and placed against Body Blows Galactic and it would be too hard to say which one is better because they both have their advantages and disadvantages. I guess at the end of the day i's all a question of taste.

Mortal Kombat does contain digitised graphics straight from the arcade machine and this technique has been used before in games like Pit fighter, but unfortunately it didn't work too well.
For some bizarre reason it actually works in Mortal Kombat. The digitised static screens aren't brilliant and if you pause the game and
look at the character sprites they aren't too hot either.

When Mortal Kombat is in motion of and you're in the thick of the action, though, all this is forgotten. There are plenty of nice backgrounds and once again the blood does look really good when you're smacking someone in the foce.

I know on paper it sounds really naff, but when you've got control of the stick and you're beating your way up the ladder it is absolutely brilliant. On the sound front the music is fairly good, but nothing really outstanding. The effects though are good, especially the digitised speech, and you'll find yourself repeating the "catchphroses".

## AMAZED

The major difference between Mortal Kombat and its lacklustre competitor Street Fighter 2 is the fact that Virgin's beat-'em-up is that much more playable. To be honest I'm amazed how they converted all the game's moves onto just one joystick.

For instance, the console versions have the distinct advantage of having loods of buttons on the joypad controllers, but the Amiga joystick just has eight directions and one fire button.

It does take you a while to get to know each character's moves and perform them correctly, but once you've overcome this little problem you can enter beat' 'em-up heaven.

Mortal Kombat is a very good one-player game, but as per usual ir's always more fun with a chum. Most people will be able to complete the game on easy level within a day, but there are still a further three levels to try your hand at.

Probe Software have done a sterling job converting the arcade smash to the small screen and I doff my cap to them. If you want a bect-'em up to go along with your copy of Body Blows Golactic then this is it. Buy Mortal Kombat, it's bloody good fun... literally.

JONATHAN MADDOCK


## Vital Kombat Statistics

## Coro, the four-armed beastie from the pits of hell, but a really nice chap once you get to know him!



Which one of these muscie bound heroes will you choose to help screp your way through level upon level of beat'sm-up fun?

Name: liu Kang<br>Age: 24<br>Height $5^{\prime} 10^{\prime \prime}$<br>Weight: 185 lbs<br>Origin: China

Occupation: Shoolin Monk

Name: Kano
Age: 35
Height: $6^{\prime}$
Weight: 205lbs
Origin: Unknown
Occupation: Criminal

Name: Rayden
Age: Immortal Height 7
Weight: 350lbs
Origin: The Universal
Planes of Being
Occupation: Deity

Nome: Sub-Zero
Age: 32
Height: $6^{\prime \prime} 2^{\prime \prime}$
Weight: 210lbs
Origin: China
Occupation: Lin Kuei Ninio
Assassin
$\qquad$



## Marcus Broom - pixel artist

Chould What advantages does Mister Magoo have over other IV/film licences?

Magoo is a well loved character known by millions of people world wide and his slapstick comedy is enjoyed by audiences of all ages.
Cuourll What methods do you employ when designing the game?

It's like going back to play school - we cut out objects from bits of paper and create bizarre events from them, and we try to connect the events together to make our map. It is very stressful but at the same time it's extremely good fun,
Gaven How hard is it to keep coming up with fresh ideas for games?

II's not hard at all, there are so many possibilities and variants.

QavgelR Does the fact that the Magoo character has already been created make your job harder or easier?

It has its advantages and disadvantages. We don't have to create a popular character as Magoo has a very large popularity factor. His personality though restricts us a great deal and we have
had to put a lot of time and effort into the design of the game.
cranmell What sort of game is Magoo? (ie background information, storyline etc)

Magoo, the game, is going to be a virtual cartoon with two distinct game feels. The majority of the game will give

"Magoo, the game, is going to be a virtual cartoon with two distinct game feels. The majority of the game will give the player control over the interactive cartoon where anything is possible."

- Marcus Broom, pixel artist
the player control over the interactive cartoon where anything is possible. Dotted throughout the game however are a number of arcade type sequences where the player takes indirect control over Magoo. The overall theme is of chaos and mayhem at the player's control.
cavorel Will you be able to take advantage of the existing Magoo cartoons and incorporate elements of them into the game? (ie graphics, music and sound FX)

Yes we will take full advantage or the original Magoo footage, so for example, we can find out how Magoo moy act in certain situations or what his basic characteristic poses are and use them as a base for our graphics and add more detail.

Cinnorl Magoo is Millennium's first licensed gome. What other licences would you like to see?

Personally I would love to work with Hanna Barbera, ie Wacky Races, Scooby Doo, or Warner Brothers/Disney.

> Gpumelr What are the levels going to be like?

There are going to be six areas which in tum are splifite two sub areas. There is a substantial difference in gane play between them. All the levels will be entertaining ond some will be positively chootic!

## Ian Saunter • development director

## Gonmen Explain the concept behind Small Furry

 Geatures...Tov'll take the part of a spirit guide, responsible for a pair af friendly creatures as they make their way around their world on a mysterious quest.
These creatures are trainable, like a pet or a young dild, having their own "brains" - so whether they sucaed or fail depend largely on the relationship you are able to teach them, as well as the natural perils of their worl.

Connr How did you come up with the idea for SFC?
We were originally influenced by Activision's Little Computer People product from a few years ago, but we wonted to progress the idea of an independent world in the machine to much greater heights than was possible in the 8 -bit days.
So we have more than one intelligent creature, a whole world for them to explore and a game running along in the background in order to keep the user actively involved in what's going on.
Steve Grand (the games programmer) has had a longstanding ambition to create artificial life and this is our chance to make it happen.

Genver The work that you're going to do in SFC sounds quite revolutionary. How will the use of artificial intelligence change computer games?

Game technology in its broadest sense has come along way since IV tennis and we now have the capability to create convincing virtual worlds inside affordable machines leven if there's no processing power left to do anything else).
What hasn't yet made much progress though is the technology that will allow us to populate those worlds and without that virtual reality is rather sterile and literally lifeless. This game is nothing more than a first step but t hope that it leads to some useful technology for the future.
The other area where this work has an impact is the "computer player". Every programmer of strategy games has at some time discovered how difficult it is to tell a computer how to play a game convincingly against a human being.
I don't mean games like chess, but strategy games, war games and role-playing adventures where the rules are complex and hard to pin down and no strategies exist.
Give these games a real intelligence, though, and the problem becomes much be easier: All the programmer has to do is keep playing the game and let the neural net watch and learn. You might not know why it does what it does but you can keep teaching until it gets it right.
An added bonus of this approach is that the computer player is still alive when the user takes it out of the box and it can continue to learn and adapt itself to the individval user's toctics.

Cane Because of the use of Al , what will the gamesplayer actually be responsible for?

The players will be acting in loco parentis for an orphaned pair of these creatures and will accompany them on their
travels around a strange world, helping and nurturing them lor being unnecessarily cruel and hurfful, if they must, though I hope they feel bad about it afterwards).
But the Al is only a means to an end; besides having brains these creatures have a past, a present and presumably, a future. A large part of the fun I hope lies in exploring the world itself and finding out about its technology, art, music, history, literature, and other lifeforms just for the hell of it.

Connin Explain in more detail about A1/neural-nets and how they will work in a computer game.

That's a bit of a tall order in a magazine article! I could happily write a book on the subject. The basic principle behind neural nets is that instead of trying vainly to make computers intelligent in themselves we use the computer to do what computers are really good at which is simulating things.
With neural nets, we attempt to simulate the behaviour of a large mass of neurones on the understanding that collections of neurones already "know" how to be intelligent and we can gain access to this power merely by asking the computer to pretend it's a bundle of nerve cells.

The only slight snag about all this is that

## "Game technology in its

 broadest sense has

## come along way since TV

## Tennis and we now have the

## capability to create convincing

 virtual worlds inside affordable machines."- Ian Saunter, development director
neurones are actually extremely complicated structures wired up in mind boggling complex ways and we don't really know what properties of neurones or their wiring are important nor even what the brain's wiring diagram looks like!

Despite that there has been real progress using neural net technology in the field of pattern recognition and some useful theory has been developed.

Unfortunately, most of this theory only applies in cases where you can establish how near the network has got to the right answer so that you can apply a correction and thus let the network "learn".
What I'm interested in is simulating real living creatures in a real, noisy environment where there are no right answers. For this, I've had to develop some new theories
of my own and if you think I'm going to tell you what they are, then dream on!


Al being of such a serious subject, what kind of look and feel will the game generate? Will it appeal to youngsters as well as older gamesplayers?

Al is a pretty weighty subject, but that's my worry, not the users. I have no intention of letting any of this spoil the game. What I am aiming to do is create a group of living creatures with the mentality of a two-year-old and the general personality of a mixed-up puppy.
All I want to the user to see is a lively and interesting living thing, which responds to him or her, can be tought things, learns about the world around it and generally becomes parf of the family.

Unlike a dog, these creatures are capable of understanding and using words so the player can teach them a simple language (any language) and ask them to do things.
For those players that find the AI stuff interesting enough in itself the game world contains a hospital where PET scanners, EEGs drugs and other tools are available for him to explore and experiment with.
This kind of thing will appeal more to the older ployer, but I hope that anyone who would enjoy owning a domestic pet will equally enjoy this game (not least because you don't have to take it for walks).

GNum How hard is it to come up with new ideas for original products?

If's not that hard to come up with new ideas many of your readers will have experienced a wave of excitement about some game idea they've had. The hard part is turning the idea into a product, which involves a combination of technical and artistic skills as well as money.

Unfortunately, even a great idea won't be done justice unless it is also conceived against a background of what mokes commercial sense. That's why we have to reject for more game ideas than we actually go on to publish.
 conversation with friends or colleagues. I have had ideas lying in bed with flu, in the car and staring into spoce, but these are the exception. At the end of the day getting ideas to work as games to work relies on letting go of "owning" the idea, and the collaborative effort of others.

Cowerir Now that you've got a full-time art deport ment what will the graphics be like in SFC?

## Exceptionally brilliant!

Cownd What will computer games be like in the future?

Bigger, better, faster, cleverer, prettier... er, ask me again in a few years.

## Liberation



> Coo lummie, the world's been transformed info some futuristic place that's full of vice, evil and corruption, and it's all been done without the Tory party

0ccasionally in life, something hoppens which is so big that it throws you into a stote of temporary dementia and paralysis, and you are unable to carry on in the normal manner.

Since I got my grubby mitts on Liberation I have been in one of the aforementioned states. Friends have been cast aside, lovers spurned (well, she hasn't, but it mokes for a more dramatic intro) and work has fallen down the back of the grille, next to something colled the bockburner.
for once in this reviewer's life, he has found himself obsorbed and interested in a new release. At long last a soft: ware house has released a fitle that feels like it has been built and designed solely for the CD32.
II's about time as well - so for all we've had to look at ore a few port-overs from the A1200 and the odd souped-up back catologue fitte.

Admittedly Diggers was worthy in showing the mochine's copobilities off to some degree, but not since the lounch hove we seen onything copable of living up to any of the hype that hos been syringed into the earlobe at regular intervals. That was of course until Coptive 2 come olong.

Interestingly enough, when the development started on liberation it was a floppy project. When programmer Tony Lozzerini heard that Commodore were going to unleash lis this on apt description for Commodore's go-get'em morketing strategy?) the first 32-bit CD-based console on the world, he decided that the mochine would be the ideol tool for his latest project.
So, unlike the majority of CD32 software to date, which relies on jozry intros and link animations to make up for spartan gameplay, Liberation con offer both stunning graphics ond involving gameplay.
Usually of this point of a review, we say

something about booting up, or inserting disks into drives. So, it's a very refreshing feeling to tell you about dropping nice, silvery, lightweight compoct dises onto CD troys.
The introduction to liberation is worth poying for alone. I hasten to odd that it's not the full:motion video offair that the machine is copable of. But, it's obout five minutes long, very neatly animated and leoves you really wanting to get into the play.

The story picks up from where Coptive leff off. Our hero Trill, having used his four droids to escope from the penol colony following his wrongful conviction, is odjussing to life in the 27.h Century.

One day Trill is watching News at Ten, ond happens to come ocross a particularly disturbing story. Being the enquiring type who obviously has scont regard for his own life and freedom, he decides to once more push his snout
in where it could get stung.
The outcome of his snooping is that Trill uncovers a mojer scondol involving thousands of other people who have been wrongfully arrested for murders they didn't commit.
The true perpetrotors of these crimes are advanced police droids which malfunction and become psychotic whenever the cily is rocked by one of its frequent mognetic storms.

Being a man of conscience, Trill unlocks what looks like a wardrobe in his bedroom, and unleashes his four mechanoid buddies into the cily.
Your droids are a very versatile bunch. When you occess their individual screen you'll find that you can doctor all their limbs, upgrade their equipment and even change the chipsets within their heads.
I's at this point that you, the good ald punter come in. It's your tosk to guide the four androids cround the city in a bid to uncover who's at the centre of the corruption and prove to the Emperor that his police force are guily of terrible misde-


Typical British Telecom, get to a call box and it's out of order

## Liberation



## Laberation : Ratt V2. 33 : Wyvern V1.92

Ross Goodtey and Antony Crowther alias the Byte Engineers. would tike to welcome you to the world of Liberation. Happy hunting.

Game playing : - Mission 1

Look right, look left, look right and look left again. gosh it's fun in the Tufty Club


Me... Im a homicidal cop killer
meanours - sounds just like real life.
To make the world of the 27 th Century a better place to live in, you must journey around the city interrogating the populace and gaining evidence to bock up your case.
Now, this sounds so for like many other RPG style fitles, with your characters wandering around a massively dull environment where nothing ever changes.
Nof so in tiberation. Here all of the charocters you interact with have variable personalities. Which means you might happen upon them on one mission and they be a miserable blighter, and then the next time be extremely helpful (just like shopkeepers, huh, folks?).

Also, throughout your travels random events will occur, so many in fact, that even the programmers don't know exactly what will happen next. Everyday life continues around you as you
drop into the plot.
Don't get to involved though, because normal life includes a cily that's brimming with vehicles. All of which don't seem to pay much attention to pedestrians and take great delight in running you down.

So what you have to all intents and purposes is a fully functioning simulated city, where you can wander wherever you want to your heart's content - or until you've completed one of the 4,000 lyes, four with three zeros/ missions.

Many of the ideas that make up this city and the play seem inspired by things like Neuromancer and Bladerunner. For example, for below the hightech bustle of the cities upper levels lies a vast subterranean underworld packed full of some spuriously dodgy characters.

Here, you'll be able to buy extra pieces of equipment and some of the 50 weapons that are featured in Liberation. Graphically, Liberation's got some of the best graphics yet seen in an adventure fitte.

All of the many locations are texture mapped and still scroll pretty smoothly. One nice touch with the graphics is the way you can look up and down at objects, and this too scrolls fairly nicely.

Much has been said about the control poddle of Commodore's console, most of which has been fairly derogatory. It has to be said that it takes some time to come to terms with the control in Liberation.

This isn't particularly to do with the much moligned paddle however, but has more to do with the fact that Caplive 2 uses a fairly complicated control method becouse of the number of options available to you.

In the sound department, liberation handles itself very adequately. It features a very rousing tune throughout play, which is delivered to you in high quality CD stereo.
The game also features a fair amount of sampled speech, which due to $C D$ is very concise and clear.

Overall, Liberation is probably one of the most interesting and engrossing fittes 'ree seen for quite a while. Once you master the contral system you'll be hooked and unoble to put your poddle down.
Its depth makes most other 3D odventures look like simple PD products. The main beouty of Liberation is that you can go onywhere and can complete the missions in a variety of ways.
Liberation is a breath of fresh air and will offer a much-needed lifeline to the CD32. IIs high time somehting came along of L'beration's qualiy to show the CD32 off.

For those who don't yet own Commodore's console, this is the level of software which will persuade people that this is the machine for them. Nice one Mindscope.

SIMON CLAYS


Busy little shopping mall this, I wonder where Smiths is so I can buy a copy of Amiga Computing?

## VISION जGGGOGOGO

 AUDIO GGGGGGGOO DIFFICULTY の○○○○○○○○LASTABILITY - OOOOの○○ Gadzook! At last, a tifle solely developed for the CD32, and you can tell. Great graph-
 ics, smart sound and a depith of play seldom achieved in computer games. If you own a CD32 buy this game, if you don't yet, then Liberation's certainly one to put the proverbial cot amongst the metaphorical pigeons.

In Liberation you can gaze up at the clouds if you care to
Publisher > Mindscope Developer > In-house

Price > $\$ 39.99$

## Gettlers



Where's that chap with the helicopter? This is a Barratt Estate isn't it?


The maximum amount of information as to how your settlement is progressing

A
 by on my shoulders, ia bok op pifies: Fortight flar doys of towe who dornty over exoggerale everything) to daw The disk out of various swecty polms.

During the lead up to This review l've not heard so mony monidors purring with sampled elation or seen so mary gleetul foces of conceniration reflect ed in engrossing streers,
Before leven booled Settlers up, I'd had various excited responses from the most unlikely of candidales. Great they said, attention to detail they said, infelligent they said, you've got to be kidding frowned:

Now, right at this present second, you're probobly gozing downat the poge, while subconsciously looking of the screenshots, finking hmm, onother I play God vpe game.
Well 40 all intents and purposes, os usual dear reader ydu dre correct. However, Settlers is more than an alsoran -it contains some of the most intel. ligent interactions between player and characters yet to be seen on an Amigo.

But whot's it all about? I hear you scream from your foke leather armchair. Well, the main aim of Settlers is to build ond run an organised, prosperous city and gain control of other enemy communities.

At first glance it doesn'l seem a very complicated plot, but the reality is a very different ketle of fish. At its most rudimentary, Settlers is based on the good oldfashioned theory of supply and demond. However, there are many different aspects within

this simple-sounding equation which you must keep under fight control to be a successsull leader. For instance, one aspeod of Selters is to conquer enemy lerritories. To achieve this warmongering ambition you need a nice army of knights.
To keep these hardy warriors happy, they need to be motivoted and armed. Well, to be armed they need weopons and to be sufficiently mofivaled to ga


Tum-fer-fum-fum-fum. No, it's not a
remedy for indigestion, but Sefflers could well be a cure for your boredom

.this chart displays the production rate of raw materials
out raping and pilloging on a Saturdoy moming the live large quantities of gold.

As you might expect, gold needs mining and weapons need to be forged from oher mined mote rials. $\mathrm{S}_{0}$, in order to extract these row moletiots from the ground you need geologists to find the veins of various cres and a huge workforce to mine Hout. , hordes of workers hove othefty appet oomeen mem, which means you must hove a sub gent amnount of food to keep the workforce with 52 Whot all his is building up to soy is that Setten has a very complicated infrastucture within it. Fron the example above you can see quite a complicale chain sysem lakeep one faction of your popplation contented.
As, there are many foctions and layers witit these groups, you've got quile a task on your hand Becouse of its complicoted nature, Setllers come equipped with a welt documented manual and se number of futorial missions.

## SQUEAKY

Evelyhing withip Setters is controlled by ir na your squody pol the mouse. Af first these tie some getting to gips with, but once you're cone sont you'll soon be ploming that Barratt estote.

The first iob you've to decide upon is where: begin your settlement. This is done by moving your mouse and didking on your left button, which at plays an onsccreen icon of the ploce you hor selected to build on.

The nex sep is to check out the surrounding brex to see if his polentiof estate has the row matericis: be prosperous: Once youve plumped for a poric: lar location, then simply clicking on the build ior constructs your first polafici residence.

After this initiol plocement of your $H Q$ you $=$ start building and the fun reolly storts. The econcry of a successtul sethement bases is foundefioer ? II sturdy gross roots. So in Setlers it's impartarts Yyou to start building the correct type of prodioa choin which will best utilise your raw maderics
1 For sxomple, if your settlement has woodafe but no forester, then the net resuit will be c does breokdown. This will mean that after a durchos beccuse the forester has not planted saplings $=$ woodautter will stort running out of timber knock-on effect of this will be on eventual sife: the monufocture of buildings.

Something so simple in its essence could oatad couse a breakdown for the whole of your seterens So it's very important that you use your raw nowern

## Settlers

## CRysin

sbuild the ight bolance wiffin your community. bo oid you in this desperate bid to bolance your Tauces you are given a series of tobles ond stotisi at gouge how your little fellows ore getting
Thin this section of setters you can also aller 7 production of goods and the prioitites in which $t$ gre generated.
tald this probobly hosn't lef you quaking with Whithent, ithing to get down to your gaming Tedrium and charging home with your copy of Ser dosped lighty in your pesspiring palm.
1 While Setllers won't grob you in print, rest Aired offer 20 minutes of playing you'll be \#solutely engrossed. What could have been a periy serious affoir has been beoutfilly crated by Snion soffware house Blue Byte.

## CIEVER BLEND

They hove manoged to give Settlers a very dever send of unique ployability and culesy humour which sochow combines fo great effect.
Each Sette chas different syle individual to his a his craft, soyou-can differentiole between eoch nobe. As you scollobout youn vibrant community, dan't be surprised to see a butcher chopping up sect or a blacksmith forging tools while his chimney Hous out smoke from the heorth
The fighting sequences hove been handled in o ey comicol cutesy foshion. Rather fhon blood and zis evernwhere, you're treated to some atesy rolls, vits and cartoony exits when you're beaten.
from the moment you see the huge intro equence to the fime you see the wind ruste through he trees or blow occross the lakes, its hard not to be mpressed. The same too applies to the sound effects,

which alter as you scroll around your graphical world. One moment you might heo the honest groft of a woodatter felling another pine ine nex youll. hear the serene sound of the woves lopping oround the edge of a loke. As if this isn't enough for your
money, you also get 50 missions and a two-ployer opfion so you con battle it out with a friend or your Amigo. With so many of the same type of fite knocking

## A Knight's tale

A tired knight was on the road to spy a nun in habit,
But from his convent quest he needed rest, and ended up with a rabbit.


III settie down in this here town and live a life of truth.
What's this I hear, it sounds quite queer, he's banging an iron hoof.


As day drew in our tired knight he came across a village,
I'm tired, I'm sore, and life's a bore, I can no longer rape and pillage.

A knight like me deserves a place that's plush and out of danger
A double stable, four rooms, a table, and an en suite torture chamber.

product that is fresh and entetoining. Also, unlike the mojoity of softwore that is fung upon us without thought or thorough checking, Settlers is actually well programmed, with almost no disk-swapping -and harty ony occessing.

- The botom line is that Settlers is an absolute - plosure to play and could well become one of he conlenders for our Game of the Year award.

SIMON CLAYS <br> \section*{VISION <br> \section*{VISION जबOGOGOGOO जबOGOGOGOO <br> <br> AUDIO <br> <br> AUDIO

 <br> <br> DIFFICULTY <br> <br> DIFFICULTY जबOGOGOOO जबOGOGOOO <br> <br> LASTABILITY <br> <br> LASTABILITY GGGGGGOGOO GGGGGGOGOO <br> <br> Settlers could well <br> <br> Settlers could well go down as a clas go down as a classic. While it containssic. While it contains elements that liken it elements that liken it <br> <br> to Populous it's not a clone. Settle <br> <br> to Populous it's not a clone. Settle stands up on its own two feet becouse stands up on its own two feet becouse it has great playability coupled with it has great playability coupled with neat graphics and an especially neat graphics and an especially user-ttiendly game system.} user-ttiendly game system.}

Publisher > Kampart
Developer > Blue Byte
Disks > 3
Price > $\$ 34.99$
HD Install > Yes
Size > 1 meg


I like the moat, I like the keep and I like the marble floor
All brass knobs and halogen hobs and a massage parlour next door.

Ah yes, I remember the days of Operation Wolf, an arcade game that coptured the hearts and eyes of the mosses. Violent it may have been, but the kids loved it to bits.
News from afor reached our merry land. The arcade blast'-em-up was being converted to home computers. Oh yes, one single poyment and your mouse became your lethal weapon and no longer would you ply the arcade mochine with ten pences a plenty.
Operation Woll hod anived and games ployers around the world smiled... a lot. The sequel, Operation Thunderboll, didn't couse as much of a stir and come and went, but for a long time now gamers have gone without a decent Operotion Wolf style shoot' 'em-up.
Virgin ond Acclaim hove got together to rectify this linte problem and the answer was to convert the highly successful Terminator 2 arcode game to your home computer screen.
The orcode version of Terminator 2 ranks very highly on my list of top ten arcode blasters not least because you could get to grips with on Uzi (with realistic firing oction!).
I was quite worried when I heard that a home computer version was on its way, The recson is the foct that although both of the Operation games tronsterred quite well to the monitor screen, they didn't quite manage to coppure the atmosphere and excitement of the arcode versions. But remember, never look o gift horse in the mouth, a bird in the hond is worth two in the bush, err or something!
Everyone should know the story of Terminator 2 by now, but for those who don't here is a brief synopsis. Ten years ogo the mochines of Skynet sent a Terminator from the future to kill Sorah Connor. They foiled to ochieve their objective. Hey, if of first you don't succeed!
So the machines changed their target, this



As you can see this particular T-800 is about to get a nasty headache


Wander around a warehouse while killing
loads of rampant Arnie lookalikes. 'Tis fun!



Hey you! Has anyone told you
about your face rotting problem?


A quick lesson in life. Don't
ever give a Terminator a lift

# TivN THE ARCADE GAME 

time turning their oftentions on the future leader of the resistance, the young John Connor. This time a re-programmed Terminator is sent to protect him and thus the action and adventure storts once more.

You play the part of Arnold Schwarzenegger and have to shoot it out with loods of enemy characters who featured in the films, all the fime trying to ovaid shooting innocent humons.

There are eight levels to complete and each one is inhabited by hundreds of T-800 endoskelatons and cyborgs. As you progress


Shouldn't the head be attached to the body? No it shouldn't because I just blew if off!

130) CAN․ R Februory 1994

## For your enjoyment, a fremzied Operation Wolf style shoot-'em-up based on the smash hif film of the same name. Hasta la Vista... baby

through the stages you foce dozens of flying and ground-based Hunter Kiler craft and ulifmately, of course, the shope-changing T. 1000 .
Your mouse (or joyslick) ploys the part of your gun which can be entonced with the likes of guided missiles ond smort bombs. As with Operation Thunderbolt, there is the opportunity to let a second ployer join the intense oction.

There isn't a lot more to tell you about Terminator 2 becouse it is such a basic gome, so it looks tike a good time to give you my final opinion on Virgin's frenetic blaster.
First of all I hove to give a nod and a wink in Probe Soltwore's direction becouse they have made a really good job of converting a mossive arcode hit onto the Amigo.

## NICE TOUCHES

Obviously it is not quite as good as the arcode version, but I don't think a better iob could hove been ochieved by anolher software developer.
The grophics are brilliont and hove been faithfully re-created from the arcade version. There are some nice touches in there such os the I-800 Temminotors geting their heods shot off.
The sound is not too bod with a liberol sprinkling of somples such as "Hosta lo visto boby", but the music is not that good and had me reaching for the volume swith.

The control method is much more occurate than the orcade machine could be, but sometimes seems to suffer and I found thot the guided missiles don't olwcys guide themselves.
It is a bloody hard game and after much ploying I manoged to get to level five, but I hod to use oll five credits to get here. Sometimes the game seems to slow down when there is too much on the screen, but moybe that is because I
wos crop and couldn't dear the enemy from the screen quick enough.
Terminator 2 was an ambitious project by Virgin and they seem to hove pulled it off. A lat of people out there will love this gome while others will frown and prefer the arcode version, but that's public opinion for you. Il you like is buy it. If you don't, don't.

## JONATHAN MADDOCK

## VISION  <br> AUDIO  <br> DIFFICULTY बのबOGOGODO <br> LASTABILITY  <br> Terminotor 2 is a <br> highly recommend <br> ed ond very tough <br> 

 shoot-em-up with top-notch graphics. An impressive arcade conversion from the guys and gals of Probe Sothwore.Publisher > Virgin
Developer > Probe Software
Disks > 1
Price > $\$ 29.99$
HD Install > No
Size > 1 meg

A\$ you may have already guessed, Alo Allo is a TV-licensed game from the extremely funny BBC hit series. Many an evening I sat in watching -thaious sitcom, amazed at the comic genius EIt cle chortling in merriment os Rene Artois ard around for the Fallen Modonna with EIE Boobies by Van Clomp, and the idiolic =3th Policeman mispronounced his French mirlay.
Aha not forgetting Monsieur Alfonse's Dickey THE Ooh pass me a needle and thread, I think vitles hove split.

Fint the game sticks very closely to this story ne and copies the same kind of humour "Seocy, Goody, I must buy it" I hear you cry) anto not despoir yet, mon ami. The game isn't arbod really. Well, sort of.

Is a bosic litile plafform romp but with some - touches and luckily you have the option to me off the dreadful accordion music soundtrat.

Itsht then, so off you set as Rene (or Michelle


Some of the top characters from the series


## Bonjour mes petits! Allow me to don my French maid's costume to tell you about zis new release from Alternative Software

muchl!). Graphics-wise ir's quite good. The house, for example, is well drown and there is a lot of attention to detail. Even the loyout is the same os the set on the television.

The charocters ore easily recognisoble from the series, too. For instance, Rene remains the stumpy, plump geeser complete with dodgy moustoche fhow he monaged to get those soucy waitesses into the d the Resistance if in two-ployer model to find Pour Knockwursts with the stolen pointings in. You can be heped olong by your friends and associates by throwing the various objects bopots, vases, even the odd bro or twol that con be found at them. They will then spring into The and help defeot your enemies in some woy. For instance, Edith will start singing which mill temporarily decfen the boddies in the form af Germon guards) and stop them coming after you. Or Yvethe will llash her stockings to distroct them the best port of the game according to some here in the office which doesn't reclly soy


The highlight of the game - supposedly
 stock cupboard I don't know.
There are some good cartoony effects such as chorocters hoving birds tweeting around their heads if they hove been hit, and typical cortoony words like "pow" or "zap" oppearing above hem.
Ployobility is a tod limited though ond in two-ployer mode it's really strange only being able to see one of the choracters ot a time. Even though invisible characters cannot be harmed by guords, they con

Here's Monsieur Alfonse the Undertaker who's after Rene's stunning wife still move obout or be iniured in a foll, which is a bit sily.
The way the "Game Over" is signolled also becomes intensely onnoying. Rene just shrugs his shoulders and goes off to hide in a cup. board. I's reolly difficult to replenish your life meter, too. It should be done by collecting bot-

Hes, but theyre impossible to find when you reolly need them.
The difficully level of the gome is obout right but how long this french buffionnery will lost you is hard to say. The humour becomes rather tedious after a while as does the gameplay. Frustrotingly oddicive? Nope, iust frustroling. Poss me the Stello Artois..
tina hacketi


## TuIV [ URRI ES <br> 

Derrr de, derrr de, derrr de. De de de de de de de de. Diddle der. What do you mean it sounded nothing like the
Jaws theme tune?

emember Tiny Skweeks? Yes, of

Rcourse you do, it featured those multi-coloured fuzzballs and was French. French software houses are not exactly renowned for their "normal" games and Tiny Skweeks was a fairly bizarre piece of software.

The Skweeks have now returned although they're now known as Tinies. The reason is becouse the people who converted the Skweek games onto the Amiga loved the style of the characters and wanted to do their own game, but as the name was already taken they had to come up with a new one.

So, it's not actually a sequel to Skweeks, but the characters look almost identical and you could be forgiven for thinking that it is actually a sequel, but ì's not. Err yes I think I got that right.

Next problem. Despite the foct that I called it a puzzle game a minute or so ago, it isn't actually just a puzzle game. It is in fact a hybrid of a platformer, puzzler, adventure and an action game.


The aim of the game is to make your way through the eight regions of Sklumph the world of the Tinies). Why must you do this? Well, a Tiny known as the Wicked One has taken control of the castle and captured the King and has in-turn thrown complete chaos and torment over the land.

It is up to you to guide a Tiny to save the King and otherthrow the Wicked One. On each screen you must find a way out which is indicated by a bloody big sign with "exir" scrawled upon it.

Via the use of some magic rings your Tiny can change into different coloured Tinies who each have their own special power. The yellow tiny utilises the power of fire and can throw fireballs and go through flames. The blue tiny has the ability to dive underwater and spit air bubbles to attack the various enemies found on the planet.

The green Tiny can throw out a line and hook himself onto almost any object linduding flying enemies) and swing about avoiding hazards just like Spiderman. When the tiny is red he gets so hungry that he con eat certain bits of the surroundings which is very handy for finding bonus rooms.

This ability to change into different forms is what brings the puzzle element into Fury of the

The red Tiny delves into a spot of early lunch. Gravel and concrete sarnie anyone?

The map of the Tinies world.
We start off with the desert level...

Furries. Just to make things even more difficult there are colour fields dotted around certain levels that takes one of the Tiny's powers awoy.

Fury of the Furries is a quirky little game and one which I think the games buying public's opinion will be divided upon. Some people will absolutely love it while others will detest it.

I actually quite like it and it does grow on you the more you ploy it. There are 100 levels in the game, so it will take you a long time to complete it. The variation in the levels is also enough to keep you entertained.

Graphically the game's characters are rather small, but just tike lemmings they still manage to command your attention. leaving the Tinies alone for a few moments will have them performing all manner of amusing antics - just one of the nice touches in Fury of the Furries.

The sound is very cheesy and layered with an organ effect that will irritate innocent


Tug 'o war! The swinging greenie gets to grips with a brick


Eight-legged fireball frenzy! The Vellow Tiny rums for his life after being suspected for spider burning, er probably...
bystonders, although it won't affect the gamesplayer. The control system is exceptionally good and moving the characters around the screen becomes second nature to you almost immedr ately.

Fury of the Furries is a strange one whid will apped to certain gamers, so try before you buy, but if you want something different this month then you need look no further.

JONATHAN MADDOCK


The new lord of the jungle! Swingin' times are ahead in Fury of the Furries

## VISION OOOOOOOOOO

AUDIO GGGGGGOOO

DIFFICULTY GGOGGGGGO

LASTABILITY GGGGGGGGG
Fury of the Furries is a cutesy bundle of fun and is on original 80\% product, but if won't

I kinda liked it though!

Publisher > Mindscope
Developer > Kolisto
Disks > 5
Price > $\$ 25.99$
HD Install > No
size > 1 meg

Bubba 'n' Stix
from around the universe - just another delivery driver


As well as the usual forms of punishment you'd expect to use a stick for, like beating diens up, many of the puzzles rely on using Stix in other ways. He can be used as a snooker cue, a fightrope bolance, a javelin and a plafform to either jump or walk on.

Progressively the levels get tougher, not only the aliens you must fight, but in the puzzle solving and


Two portions of fish and chips and a por-
tion of mushy peas, please... no?
dexterity department.
Bubba ' $n$ ' Stix comprises of five levels and a number of bonus stoges, and fealures oll of the things you ludyy roscols have come to exped of plafformers like restart points, power ups and score bonuses.


Bubba gets the shock of his life, when custom officials detect him smuggling a shipment of drugs in his stick
redly, see the irony folks?
Unfortunately for Glik, he manoges to lose control of his ship and sends it spiralling towards the planet below. In the ensuing crash, both Bubba and the other occupants of the spoceship ore sent flying out of the back of the ship, onto the surface of the alien world.

As Bubba recovers, he is hit on the heod by a stick. But, this is no ordinary stick, this is Stix. As Bubba goes to walk away, Stix follows him.

This is a pretty dumb thing to have done because for the rest of the game Stix is continually thrown, wedged and trodden on. Ah well, wéll just presume that he's a good old stick

Anyway, whatever the context of their relationship, what we have here is a very dever little puzzler. The first level sits you on the planet surfoce where you crashed, and almost serves as a tutorial for you to become fomilior with the uses of Stix.

It takes the first of five or ten minutes when you're playing Bubba to become familior with the logic behind the puzzles and the many ways you can manipulate Stix. A


Bubba uses the old "get the alien to smash the other one over the head with a lump of four by two " routine to great effect

VISION
GのGGGGGの
AUDIO

DIFFICULTY GOGOGOGOOO

LASTABILITY GGGGGOGOO
It looks good, it
sounds good, it even plays good. By lingo

## $\begin{aligned} & 0 \\ & 0 \\ & 0\end{aligned} 1 / 0$

 It is good. A definite-Iy sound investment
ly sound investmen
for platlorm puzule cartoon fans (you can tell I read the press releases like a good boy).
Pubisher > Core Design
Developer > $\ln$ house
Disks > 2
Price > $\$ 25.99$
HD Install > No
size > 1 meg


Howzat! Another fiendish 90 mph delivery from Curtiy Ambrose leaves Lewis with a long trudge back to the showers

The very thought of cricket sends the mind spinning into images of summer. Pietures of lying in sunbleached fields with nostrils filled with pollen and a head filled with the hazy. lazy sound of leather on willow are summoned,
Unfortunately the reality of village cricket is much different. This form of cricket has long since lost any hint of being the gentle, noble sport it once was.
Instead what you get for your apres Sunday pub entertainment is 22 overveight farm hands filled to the brim with whatever ale has been quaffed in the nearest hostely.
Filled with as much Dutch courage as is possible within the allotted time, it seems the romantic image of the sporting gent is lost. What remains is one bloke chucking a piece of solid leather at another bloke with a large blunt piece of wood in his hands.
The sole intention of the chap with the plank in his grip is to hit the speeding leather at ten chaps who stand around in various stupid locations waiting to block the tump of speeding cow skin with their soft fleshy areas.

That's the amateurs, the professional is obviously a different animal attogether. But what neither seemed capable of pulling off was a decent computer simulation of the noble sport.

Both Robin Smith and Beefy Botham have bowled veritable no-balls in this particular department, coming up with pretty tame licenees which have disappeared quieker than the English middle order.

## PLAYABLE

The only man who seems to have pulled it off is the Nigel Mansell of the cricket world, Graham Gooch. The Essex and exEngland captain (with just a tad of help from Audiogenic) produced a very playable, fairly reallstic cricket simulation.

Well, the moustachioed one is back with an improved version of the game called Second Innings. Getting to grips with Second innings is fairly simple and the system it employs for control relatively straightforward.

Initially the first thing to set up are the match parameters. You have the choice of just about every World class team you could care to mention = even England. But, with Si you can also choose from every county side in the country plus a "moments from history" option.

This option allows you to re-live great matches from the past - for example, lan Botham smashing the Aussies to pieces in the third test back in 1981. Within all the


Boycott guide to Creekeet No 1, Adjust your strap, keep stump straight and thatII keep yer bails intact


Boycott guide to Creekeet No 2, If you want to stay in forever and not score any runs like I used to, don't hit the ball

## (6) WORLD CLASS CRICLIETS SECOND INNINGS

## Yes indeedy, it's time once more to buckle up your pads, adjust your strap and watch out for those googlies

teams are a full squad so you can choose the individual players you care to, along with their particular skills.

Duration, amount of overs to be bowled and a number of other configuration options can all be aitered so that any type of match can be simulated.
Playwise, Graham Gooch's Second Innings is pretty simple to pick up. The batting aspect of play is fairly instinctive with the shot selected through a movement of the joystick.



0nce ogain the nth dimension is under athock from the forces of non-imogination, the evil Krool and his accomplice Mental Block. Zool, assisted by his fenole companion Zooz and Zoon the intergolocic wonderdog, are here to save the universe from boredom.
So what have Gremlin come up with this time around? What new and wondrous features hove been odded to make this a darn fine sequel?
Well, there's the new two-plyyer mode, and of course, this time around Zool can be helped out by his kinky, whip-cracking assistant Zooz.
The game is instantly playable, the controls hove been mode easier, the sound effects groovier, backdrops more colourful ond detailed. The game is bigger than Jean-Claude Van Damme's biceps and each level is jam-packed with impressive grophics and bright and imaginative sprites that you can fire bullets at and, in Zooz's cose, whip!
The enemies change from level to level and are

> Is it a bird? Is it a plane? No, it's the return of the ninja from the $n$th dimension and this time he's got company

related to the world they live in. At the end of each world there is the tough end-of-level guardion, Mentol Block, who hos morphed himself into some boddy which is again appropriate to the level.
The worlds have been ingeniously named (well, sort of like Tooting Common, Bulberry Hill and



Snaking Pass. There are many bonus rooms to stumble ocross filled with Chuppa Chups goodies along with oher bonuses scottered oround the levels lyou must collect 99 per cent of them to complete the level) and others which will help you out such os Shields, bonus hearts and thankfully many restart points.
The ninjas are also helped by some new moves. Pressing Fire while your chorocter is in the air will result in spinning power jumps and back flips can be achieved to reach heights an ordinary jump wouldn't get to. False floors and ceilings can be broken through to reach other ports of the level.
This is where your choice of character can molter as Zool can only go through ceilings and Zooz can only go through floors and therefore the game can be completed in different ways.
However, the downside of the game is that the range of options are not as varied as Zool 1 . There are the bog standard options you would normally expect to find on your average platformer such as level of difificulty, music or sound effects, but the nice louches that were added to Zool 1 are missing
In Zool 1 you could choose the type of music you wanted from rock to rove, or the speed of the
has been added io give a new angle to the game, but it seems a lititle pointless becouse you and your companion hove to take turms to play.

Well, surely that doesn't make much difference and can be done on a normal one-player game? Maybe if a split-screen option could have been introduced it would have odded some variey from Zool 1.
There is no doubt that Zool 2 is a very oble plaftormer. The graphics are amazing, the sound effects superb and it boasts great ployability

But, as with a lot of sequels, it inevitobly lose its originality and novelly volve. If you're a platform addict and enioyed Zool 1 then youll probobly go for this but don't expect anything 100 original.

TINA HACKETT

## VISION GGGGOGGGO

 AUDIO जのGのGGGGO
## DIFFICULTY

 LASTABILITY
GGOGOGGGO

Although not highly original, 20012 is a great platiormer - it has superb graphics an amazing sounditrack and speedy gameplay.

Pubilsher > Gremilin Developer > in House Disks > 2
Price > $\$ 25.99$
HD Instoll > No
Size > 1 meg

## Cannon Fodder



The first level and while exotic birds fly overhead, the killing has already started below...


Clicking on the world icon will give you a map of the current level. Handy for planning routes and pointing out places of historical interest!


The warm weather causes our brave troops to strip off inte their cozzies and take a nice relaxing dip in a mearty river


An outraged Liberal Democrat MP called it "monstrous". British legion chiefs labelled it "appalling". The Star said it was "shameful" and advised people to make sure they didn't buy it.
As you might have guessed from the headline on the page, "it" is Cannon Fodder, Sensible Software's latest offering. Why all the publicity and all the fuss? Well, papers will be papers and they will blow things out of proportion.
The reason for all this uncalled for and unfair publicity is because Sensible included the distinctive poppy symbol into the game. MP's and war veterans were apparently outraged which is fair enough I suppose, but there are ways and means of getting a problem like that solved.
Having a newspaper sensationalise the problem, going over the top and spreading inaccuracies in their reporting, is not the way to do it. Cannon Fodder is not shameful, monstrous or appalling, but is instead one of the games of 1993 and my money is on it becoming the Christmas number one.
The poppy has now been removed and everyone is happy except perhaps publishers Virgin and Sensible Software themselves
who could have done the squad of fearless young men meet without any of the hassle up with a mative doing a tribal dance
involved. Enough of all this, you lot want to know about Cannon Fodder. To save you reading to the end of this text I could just tell you to go out and buy it and thus there still might be some copies left in the shops.
Sensible Software have never really produced a bad game and more recently have dominated the software market with such excellent products as Mega-Lo-Mania, WizKid and Sensible Soccer. Most of their titles are tinged with elements of surreal humour, especially WizKid and the highly amusing team names in Sensible Soccer.
Cannon Fodder blasts off with one of the best game tunes of ' 93 . H 's a sort of reggae-style composition with a woman singing over the top of it. She croons "War! Never been so much fun!" and you know what? She's probably right.

## Sensible Software refurn with a bang with their supposedly controversial war-'em-up

As the song plays you a treated to a menagerie of digitised shots of the Sensible Software team dressed up as soldiers. As good a way as any to get your face in a game I suppose. Once all this tomfoolery has finished it is then time to enter the war zone.
Before the action actually starts, you need to call up some of the 360 fit
young men to become troopers.
Only 15 of them are allowed to volunteer for each mission. As missiont progress you start to lose men ant innocent soldiers are thrown into we with the more experienced troops.
There are $\mathbf{2 4}$ missions to complete each one has a different terrain ant objective. Most missions are split into e


Here we admire Boot Mill. A place where several innocent young men volunteer to be shot and killed, err I mean join the army and do their bit for Blighty!


A quick lesson in blowing up enemy sheds. 1. Get grenade 2. Pull pin out 3. Throw at target 4 . Stand back and watch while men die and chaos ensues

Forget about pointless maiming and killing. Why not take a trip to the beach!

maximum of six phases. You do not directly control troopers, but instead determine their behaviour.
This is achieved by using the mouse, the mouse pointer and a troop leader. Troopers will only follow their leader, but they can also be encouraged to split up and do their own thing.

## PRIVATES

At the beginning of your adventure all the troopers are conscripted as lowly Privates (I know a joke about that! Not very funny, but I know one). Your troopers ranks increase for every phase that they survive, but promotion only occurs when the mission is complete.
The missions stant off very slowly and are quite easy. You start to wonder why you need 360 men, but as soon as you hit the fifth mission everything gets that little bit harder.

In the previous levels you have met up with "normal" soldiers, but later on you start to meet bazooka wielding troopers and you then realise that Cannon Fodder isn't the breeze you thought it to be.

## CONTROLS

The control system is worth mentioning simply becouse it is so good. The very first level and it becomes as natural as eating your tea. The mouse pointer is swept around the screen and more of the terrain is shown to you. By clicking on that point with the left button, your squadron of troops will move to that point.

The right button is your killing button. When pressed it lets rip with a deadly hail of bullets from your soldiers. If you

use a combination of both buttons you can use your grenades or bazookas which causes major destruction upon the enemy.

At first Cannon Fodder looks fairly run-of-the-mill stuff. Some people might even call it an average shoot-'em-up, but as you progress you get addicted and the completion of a level becomes more important than eating, drinking and maybe even life itself (err, probably).

Sensible's war-'em-up is one of those games that you can completely immerse yourself in. The graphics are brilliant. Although the men are small they seem to have characters all of their own which is attributed to the animation. Losing a man is almost like losing a best friend.

There are loads of nice little touches such as the men celebrating after completing the phase to the sound of patriotic World War tunes. Another nice
touch is when one of your men takes a bad hit and lies on the floor screaming his head off while blood shoots out of his body and it thus becomes your solemn duty to end his pain.
It's sad and quite painful to watch, but you have to wipe those tears from your eyes and get your revenge by defeating the enemy.

The sound is quite incredible and uses up all four channels to create some startling effects. For instance when you are marching around the jungle, exotic birds fly overhead and their squawking becomes louder the closer they are to your troop.

## DIRECTIONAL

There is a more important reason for this directional sound malarkey because you can use it to your distinct advantage. Muted gunfire tells you that enemy soldiers can see you are heading in your direction, the same goes for
helicopter rotor blades. The rumbling of a tank means that you should run very fast in the opposite direction.

## SUMMING UP

Being a games reviewer you must point out good and bad points for each piece of software, but I am getting a headache from trying to criticise Cannon Fodder. I suppose it could do with a two-player option, but apart from that I can't really find cause for complaint.
I love Cannon Fodder and so should you. If you still haven't bought it then I must stand up and question your state of mind. Sensible Software seem to go on from strength to strength. Cannon Fodder is one of the most playable games you will ever play and also one of the most fun. A rootin' tootin'shoot-'em-up of the highest order.

JONATHAN MADDOCK


cool Spot. A spot that's cool. Why? Well, after thousands of cutesy characters have infected our minds, it looks like games developers are gelting back to basics, and what could be more basic than a red spot?

Hipsters out there who are "up" on the console scene will know that Cool Spot made his fame and fortune on the Mega Drive, and a

Cool Spot jumps for joy as he five one of his captured dian
startlingly good game it was too! Before his Ironsition to the games scene, Cool Spol was just a simple red blob on the side of a 7 .Up can. Some dever person must have seen a good morketing opportunity and suggested that: "Hey, wouldn't it be good if we mode a game using the 7 -Up red dot? Then we'd hove loods of kids subliminally forced into buying our rather splendid fizzy drink! ${ }^{\text {º }}$

## CONFUSED

As soon as Cool Spot hit the UK, the fizzy drink tie-in fell apart and this left gamers confused as to why there were lirtle green plastic bottles all over the ploce. The game was so good though that no-one noticed this litte discrepency and gamers bought Cool Spot like it wass the last piece of soffwore on Earth.
Virgin, being clever people, decided to convert the console smosh hit to the Amigo. They've now got their fingers crossed and are hoping it

> Hey, he's the coolest spot I know and he's putting in a star appearance on the Amiga courtesy of Virgin. Jonathan Maddock goes complefely dofty...
will sell just as well on the home computers.
Virgin are plugging Mr Spot as the coolest, most controllable and slickest animated choracter ever seen on any computer or console system. That is a bit of a proud statement, but it could well be true, os their sales on the Mega Drive can testify. The story is relatively simple. Cool

Spot's friends, all colled Spot (which leads into all kind of comedy situations) have been cought ond coged. The being responsible is apporently a bod "dude", has a stupid hoircut and possibly the worst name on the planet, which is Wild Wicked Wily Wil. The gamesployer (that's youl) must control Mr Spot, dashing around collecting


Mr Spot leaps for his life after coming face-to-face with a nipping crustacean


Oh come on, you can't bored already. I think the excitement of this platform tomfoolery has worn out the hero of the game
smoll
definitely not cool spots. This sometr frees Cool Spor's chums. "How does ter work?" I hear you cry. I don't know, her ? does!
Cool Spot has a large problem, or shoult ter be small problem? Our dotty chum is ant = inch and a half in height, so everydoy abies become unbelievable obstacles.
He must battle his way ocross the bead th bathroom, and people's bedrooms, and $=x$ lh way comes into battle with all kinds of att bod guys. His only weopon is linked to tis $=$ nection with 7 -Up. The spot can thus fir $=$ should that be spewl fearsome bolts of ita drink at his enemies.

## CONVERSION

John Twiddy, the mon responsible for Vigy other Mega Drive conversion, Globol Glodits is in charge of the conversion of Cool Spot tes Amigo.
He promises that Cool Spot will be vinat identical to the Mega Drive original. For erast all the onimations that were in the consice $=$ sion will appeer on the Amiga. There wil octe ly be some slight improvements like Spot $1 \times$ wal being speeded up.
The main difference is that the Amige som updates every 25 th of a second, where $a s t$ Mega Drive updates 50 times a second, se tm scrolling isn't going to be as fluid os in ter - original.

Having played a couple of levels, I how a say that Cool Spot is looking damn fine orz personally can't wait to play the full thiss Another cutesy plafform game is on its wor, be when they're as good as this we shouldn't molt grumble. It's going to a red, round and wn very cool start to 1994.


Ballooning around! Cool Spot "hangs" out with, err no-one because he has no friends


Nice pants! One of Spot's evil enemies comes out of his shell



Let's trek to the land of the rising sun and take a look at Psygnosis' action adventure extravaganza!

0vick question! How many of you lot bought First Samuroi? Not many I con bet. First Somurai was perhops one of the most under-cated arcode

Soltware's Mega-Lo-Mania a year or so ago. It really wos a crying shame that gamers couldn't play Vivid Image's First Samurai becouse it was the ultimate Amiga arcade action games of all time. Published by Image Works, a sub-division of the Mirror group, First Samurai went downhill when Mr Moxwell went deep-sea diving.

The distribution of the game suffered badly and it was very hard to find a copy to buy. The only instance when you could obtain it was when it was bundled with


The first level and you encounter your first "big" enemy, in this case a floating, firebreathing monster type thing game of that era. Psygnosis, clever people that they are, have signed up the sequel, so Vivid Image hove returned with Second Samurai (nice original titite!)

The story is very similar to the original. The Demon King is once more rampaging through time and you as the Samurai Ninja-type bloke must chase after him. Various adversaries stand in your way coupled with an abundance of puzzles to solve.

Second Samurai is a fairly good name, but it has a double meaning. Not only is it the sequel,
 be able to do away with this rather menacing dragon. Cor alumme!


Here our hero protects a precious idol from a... a... thingy. No wonder he's crying!
but you can now connect up with a chum and enjoy a simultaneous two-ployer game. There is a bit of a snag though. The two-player option is a bit duff.

You have the choice of competing against your mate or befriending him/her and working together to defeat the evil Demon King. The choice is, os they say, yours, but they are still both fairly useless.

You see, the screen isn't split into two, so both players cannot move independently around the level. This causes all manner of problems. You con fight for the weapons and power-ups, but it's unfortunately all rather pointless.

This sounds like bad news, but it's not really because if you lock yourself away you can enjoy a damn fine oction odventure game via the one-player mode. Aport from thiv ivo-player mistake, everything else has been made bigger and better. The gameplay has t.sen left alone, but that's only because it was so good first time around that it didn't need to be changed.
The graphics have caused a bit of an argument in the office. Some people have said that they look rather dated and very '80s, but I disagree with this. Some of the backdrops are really nice and the sub and end-oflevel monsters are so spectocular they almost take your breath away.
If there was an award for biggest game sprites then Second Samurai would walk away with it unchallenged. If you don't believe me just look at screenshots!
The sound effects in the originol were one of the high points and luckily the sequel has kept most of the samples. When you kill something you're treated with an orchestral stab and by killing loods of enemies you literally create your own atmosphere.

There are also screams, yells, hallelujohs, err the bit off the Old Spice odvert and also the infomous "Oh no! My sword!' sample. The kicks,
punches, thwacks and smacks seem to howe been lifted from beat - 'em - up favourit International Karate Plus, but hey that's no bae thing!

I can't really put my finger on what it is, bell really do love Second Samurai. IX's one of the games that you try to play and ploy untly y : complete it. The difficulty level is just obout int and you seem to progress that little bit forte everytime you have a go.

OK , ir's maybe not the most original gane at all time and the two - player mode is, as I Ee tioned before, not very good, but there ore $=$ outstanding foults with the game.

I would heartily recommend Second Somar: to anyone. If you're looking for a well-prep grammed, wonderfully playable, graphicely brilliant, awesome sounding, highly oddicin piece of software you have to look no furthe than Vivid Image's Second Samurai.

JONATHAN MADDOC:

## (CATABP




# shiducris 

## Level 1

This is a small area to explore. Here is the best ploce to learn about the techniques needed to progress further. light is required to read computer terminols which give vitol clues. Pressure pads and photo-cells can open doors; you should also become fomilior with using keys.

All objects found should be token, as later there ore plenty of pressure pads which all need to be opened using weight. After you've got used to the control technique irs off to level two.

## Level 2

It should be noted that some of the robots will leave some valuoble presents when they are dispotched. In the next two rooms the first long range weapons will be found.

However, all long range weapons hove ammunition limitations, so be careful how you use them. I's on this level that the first two recharging stotions con be located.
The first re-supplies food and can be used an unlimited number of times. Conversely, the second is for weoppons and batteries and can only be used once.
Once all the robots hove been eliminated you con proceed to the next level.

## Level 3

On entering this level there is another weopons rechorge point. I's best to use this one when your ammo is at a minimum.
You should now make your woy to the

## Tired of fumbling around in the dark? <br> Then zip up your shiny suit and follow us through the Iabyrinth of the Shadoworlds

> Whis is the sequel to Shodowlonds. I's now set in spoce, where light ond dark both play a vital role. Therefore batteries and flares need to be used sparingly wherever possible.
> Before embarking on the mission you will need to select a team of four adventurers. A spreod of skills is the best possible combination.
central room of the Biological Research area. Using a light to open the door, there should be a robot. It is carrying a crote, so when you've killed it open the crote.
Toke the contents of the crote ond deploy it as you see best. Now put the emply crote on the pressure pod to open the next security door.
Enter the next two rooms, kill the robots and pick up the medicol pock. You will olso find a key; by going to the centrol room you will be oble to use it ond enter.

Kill all the robots and you can use the food outer and the very useful regenerction pod. The pod resurrects dead chorocters so long os you hove bought their DNA pod. Be worned, the pod only works three fimes.
After this, proceed to the centrol room
and go through the remoining door to the tronsporter. Worning: beware of the pits en route.
When you arrive at the tronsporter you should find another weapons recharger, using a green card should secure you a loser - iust the ficket!

## Level 4

Hoving exited the transporter, heod down the corridor to the first room. Access is denied by a pit, the only woy to close the pit is by throwing oflore over it. This will operate a phot- cell, which in turn closes the pit ond allows you to pick up another key.
In the next room there is another pit with a key which is just out of reach. Throwing something on the pressure pod moves the
key within reach.
Now you can open the corner door az move quickly into the litile recess. Fire offer robot when it is as safe as possible, lictite flore and throw it towards the door.

The robot will heod to the light. As le posses you by, stob him in the bock.

Next on the ogenda is yet onother reem which requires the lighting of three phetr cells to get to the key. The following rees calls for some teamwork: One mon to coper ate the door swith, the other to fire af $t=$ robots.
When you've monaged to obtoin the key, you should leove one man here sole con open the door in a litite while to le another man out.
The next room contains a one-woy sp tem, so only one man can enter to colled the keys. To get past this section, the man you have sent in must stond at the edge of ter pit and throw the keys to another teem mate, who will open the door for him to escope.
In the next room one character must operate the woll swith which will turn on the tronsporter. Ploce a man in the troms porter and he will be tronsported to the lilte room to pick up o key. Operating a swith sends him to where you left a mon to open a door. At this point you con regroup ond collect more food if necessary.
The next room contains a key which when picked up, makes three robots appeer, so be warned.

The last room on this level contoins a


Keep a constant eye on your team's Ievels and thelr formatton


Ahwas cheose a balanced squad which reflects a varlety of talents


Look out for pressure pads
as they unlock doons


In many drcumstances ilfot ploys a malor part in your success or follure
robot, a key and a slot. Kill the robot and use the gold card in the slot to reveol a secret room full of goodies.
Ahter that dispose of the final robot, and ii's off to the teleporter.

## Level 5

Outside of the teleporter is a fence. Like oll fences in Shadoworlds it should be treated with extreme coution. It's best to walk one man at a time around them for salety. On the plus side you can hide behind this fence and the approaching robot will commit suicide.
Then ir's a long walk to the centrol teleporting area. The key that you should have collected opens a door, which will transport you to ke World.
The choracter that you send to ke World should be the strongest and be mode as light os is possible.

## Level 6 - Ice World

On arrival you will have to move very quickly and dodge the mulifiude of robots that inhobit this section. Eventuolly they can be lined up so that they fire on one onother.
You can collect the crate and use the tronsporter pressure pod to get back to the teleporting area.

This crate contains a key so that you can open the next door to get to Jungle World.

## Level 7 -

## Jungle World

The person who you send here needs to be equipped with a light sabre, plenty of flares for light at night and also some food.
Near to the pressure pads are three guards who do not always fire at you. If you are hedilty, sove the game here.
Using the pad tronsports you to another jungle, where once agoin you are attocked immediately on arrival. Collect your crate
than flee as fost os possible back to the teleporting area.

## Level 5 - Continued

Rest the porty again, feed them and kill the robot guards. Now use the teleporter.

## Level 8

The first mon out of the teleporter should be armed with a flame thrower to kill the wandering bugs which are there to greet you. On this level are four rooms, eoch hos a pressure pod which requires a weight leeving on it to open the exit door.

The top two doors are quite straight-forword. However, the centrol connecting room is quite tricky, so sove the game before venturing further.
On entering you will be altocked by heods, so stand in the doorway and use the light sobre on them. You will then hove to very carefully walk one character around the fence that obscures your path.
After killing the remoining heod, dodge post the robot in the bottom right room ond move onwards.
The lost room tokes a team effort and plenty of light. This is becouse all the lights in this area are activated by photo-cells. The last room is ocupied by a robot who will kill himself if you occupy the right spoce.

## Level 9

This level is full of pits, but they con be closed by using light to operate the photocells. The two rooms are symmetrical so only one side needs to be closed.

Kill the guords and hove a lighted flore availoble. You will approach three photocells, which depending on which is activared opens a combination of two doorways.

It is vitally importont to leove one man here if you want to complete the game. Walk around the corridor until you reach a swith.

Use a light to open it, and then stond in the doorway with your sobre drown. As the guards walk by, kill them the third guard will not cause you any bother and
can be left alone.
Place objects on the pressure pads to open the next two doors and then move on to the next room.
There are two heads that wander around that must be despatched with immediately. Then find the pressure pod which is up a small dead end, place an object on it and the last door to a telepart will open.

This room contains three buttons. The first will turn on the teleport, so position a man there with a light-sobre, while another team member operates the button.

The teleported character will arrive in a room where casting light onto a photo-cell releases heads. Kill the heads and get the character at the buttons to operate the second.

This will turn on another teleport which transports your character into another similar room. Once again light releases heods which need to be dispached with. Pick up the key and use the button controller to press the third button which returns the transported character.

Now you have a hell of a trek back to the teleportation room on level five. You can now use the key to open the last room. The character that enters needs to be a fast mover.

## Level 10 Desert World

On arrival walk past the two robots, but do not stand too long in one spot or you may receive a rather unpleasant surprise from a sand monster. progress to the pit and jump in.

## Level 11

You will have to move exiremely quidkly to dodge all the robots that are firing on you. This will probably take some doing and moy use nearly all your team.

Provided you have one survivor every thing will be all right. Once all the robots have killed each other there's only one room to contend with.

Throw a lighted flare into the room and it releases two heads. Stand in the


Ahways keep a sharp eye
on your team's formation
entronce woy and despatch them ving the light sobre.
A robot also occupies this room; he cannot move from the room until both lights are removed. Wait until the robot has moved into the corner where the heads came from, and then enter the room.
The robot will fire, but the shoss will rebound and kill him. He will leove a key to the last door which when opened completes the game.

## RUBY CHARTBUSTER <br> ATRAN <br>  <br>   



CHOS ENGHE MMEG....
CHAOS ENGINEA1200....
CESS CHUNPON 277 .
CMLSATION TMEG 2175 .-............
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DEEPCOAE
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DISPOSABLE HERO...
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GENA WORACS: -
GOEAL DOMINATION

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## RUBY SERIOUS/EDU

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> Nothing beats a bit of bargain hunting affer Christmas, especially when you're almost complefely out of cash, says Tina Hackeft

## Street Fighter II US Gold • £14.99



This is a game that needs no introduction from me. Unless you've been kidnapped by aliens from outer spoce then there is no way you could have missed all the publicity and hype surrounding this game. And as if you thought it couldn't get any better those nice chappies of US Gold hove released it on budget.
Stunning grophics coupled with great playabiliyy moke for a greot game. The soundtrack is good, as is the choice of options. The mo-ployer mode works brilicinty and with the different levels of difficully to choose from you've certainly got a challenge.
However there are a few grumbles. For instance, the disk accessing con get to be a real pain and it ploys slower and not as well as the arcade version, but this is only to be expected.
OK, so maybe I'm uss being pedantic and so maybe ifs not as good as Body Blows Goloctic, but who om 1 to judge? Besides at this bargain of o price, who could refuse?



Bernard Manning takes on Boy George


Billy Putty is being a silly sausage isn't he boys and girls?

## Silly Putty Gremlin • $£ 9.99$

Well, needless to soy I was slighly sceptical when I first heard the concept behind Silly Putly. I mean how much fun can you possibly hove with a small round blob? However, I was rather impressed with his little budget offering from Gremlin
As a combination between a puzzler and a plafformer, the aim of the game is to protect your puty-rype fiends from the evil doers Dazzledaze and Dweezil who intend to ship them off to Earth to be tumed into bubblegum.
As Billy Pulty, you can be cided by the Boss (friendly cliens from the planet Zid) but unfortunately they hove been turned into ice blocks. Confused? You will be!
So now you hove to rescue them and toke them to ploces of sofery. But worch you don't exceed your fime limit, and keep an

eye open for boddies such as Custard Men and Snot Goblins (och, nicell How can you possibly compete ogainst all of this? Well luckily you con fransform into different shapes and bounce, melt and inflate lo your hearf! content, being the pulty-type crealure you are.

This game becomes rather addictive and once you have mastered the controls to carry out the range of movements Pulty can do, it's a great game.
It is nice and witty and the humorous sound effects and bright, colourful graphics should put a smile on the most miserable of foces.

## Torvak the Warrior Corkers • $£ 9.99$

Now here's a game I hate almost os much as I hate Mocavey Culkin
Boring gameplay, boring graphics and as for the music - well I'd rather lisen to Mr Blobby's his single. In fact, this game is more disoppointing than continually getting the oronge creams in a poder of Revels.
You, as Torvak The Warrior, have to overcome five different levels, defeating the Giant Moggots winged Drogon Bats and Swamp Monsters with your big weopon. However, the weopons are ineffective, even against the simplest of boddies and as for the helpful bonuses (such as Magic and Energy Orbs)... I think not.
Sorry I can't sound more posifive about this one but it really is rubbish. Poss me the Pooper Scooper, please.




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## AMICA <br> insight <br> Expert views on the latest applications

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As promised, in this issue we are going to examine a system which allows us to use the Amiga's Intuition graphics and interactive interface from within ARexx.
You probably already know that ARexx does not have any direct graphical interface support, and all such support must be provided by third party add-ons - usually in the form of a special ARexx library.
Several such products are available, and the one we examine here, RexxARPLib.library should be obtainable from any good PD library. Make sure you get v3.0, especially if you are working with WB 2.0 or above.
My aim here is not simply to give a few examples of how to use this library, but also to convey the "flavour" of the system, so that you can see if it suits your needs.

I assume that you have some working knowledge of ARexx, or at least some programming background, and the ability to pick up facts as you go along.

At this stage I must (by the way of caution) say a few words about graphical commands in any programming language. Essentially, any language that provides graphical commands makes a compromise between ease of use and flexibility.

On the one hand it can keep the commands as simple as possible, so that the user has most of the basic operations available; on the other hand, it can allow the user to exploit the system possibilities to their full extent.

In the first case users will be limited whenever they try

## the original system library.

There are two advantages to this: Only a little flexibiliny is lost, and, should users want to advance to more "real" sysen programming later on, they will not find themselves totally due less, or starting from scratch; a fair amount of material will lock familiar. Suggestions on how to proceed further appear at tre end of the article.

I must also say that if after studying the documentation, the examples, and perhaps some books you still find this utility too difficult to use, then system programming is probably not for you. Sorry folks, but you are unlikely to find anything much simpler that is half as useful!

If this is the case, and you still want to program, try using simple languages with ready-made graphic commands (like some Basics), or graphic program-builders, such as CanDo, thar also have the advantage of ARexx support.

We will now briefly look at how RexxARPLib.library gives us access to the system's graphics. In Amiga programming, when you want to open a window you do so by initialising a whole lot of data, opening a screen if one is not open, and then calling an Intuition function called OpenWindow(.

This window will have (among many other things) a RastPort, which, roughly speaking, is the area you draw in, and a "message port" at which the user can check if any events like

# Graphics 

to do something that goes a bit beyond the bare-bones basics; in the second case, they will have to learn not only the language itself, but also all the programming intricacies of the system's graphic interface!

This can be quite complicated if you want to use a Graphical User Interface (GUI) that receives input from the mouse and so on, as well as creating graphics.

Broadly speaking, there are two levels of graphic programming, a bit like there are two kinds of languages, high and low level. (You can do many more tricks with assembler than with Basic, but you really have to work at it.)
Essentially, the languages that provide ready-made graphic interface commands shield the user from the system intricacies by "packaging" the system-level calls into those instructions that are most likely to be needed, eg OpenWindow() or DrawCircle).
Languages that allow full control over a system graphic interface (such as the Amiga's Intuition) merely provide a method of hooking into the system library routines, quite independently of the programming languages themselves.
It is the user's responsibility to call these routines properly and to ensure that their rules are observed. In order to do this, you have to learn what the rules are in the first place. This can be almost as much work as leaming the language itself.

On the other hand, if you know how to use a system library, you can call it and use it from any language that has a system interface, whether that is C, Assembler, Modula-2, or Basic. Using special libraries (not RexxARPLiblibrary), it is even possible to call them directly from ARexx.
The ARexx graphic utility that we will be looking at today provides the best of both worlds, by shielding the user from some of the messier system requirements, while at the same time maintaining a fair amount of similarity to
mouse clicks, menu selections, and so on have occurred. The above is quite an over-simplification, but it will help you get the general idea.

A programmer wanting to draw or write in the window calls special system functions that use the rastPort's address as one of their parameters. To monitor the user input, the programmer would set up a loop that kept checking the window's user message port which we just mentioned.

However, ARexx on its own does not allow the user to call the system libraries which open windows or draw graphics and so on. RexxARPLib uses an interesting system to get around this. The library provides a special function called CreateHost(hostname,nport), which sets up an autonomous little program (the host), which handles these calls automatically.

The extra advantage of this is that you do not have to worry about any of the initialisations - the host does them automatically too. We will see what the parameters (hostname,nport) mean in a minute.

There must be at least one host for every window that you want to open and it must run asynchronously. This means that the program must be run independently inside the Amiga multitasking environment. Again, we will see why when we look at the parameters. To run a program asynchronously, you must either run the command:

## ix "catt treatehost (hostnane,nport)"

from its own sbell window, or, if you have it as part of the program itself, you must launch it with a line like:

## ADDRESS COMMAND PUn $x x^{\prime}$ '22' $x^{\prime}$ 'Call Greatellost(hostnane, nport)*

Note the ' 22 'x (quote), which ensures the correct form, sine the quote before Call is lost during the concatenation.

You cannot just call the function on its own as part of your
program, because it will not return a value until its window is closed, and all its graphics are lost... and we haven't even opened the window yet!

This is why this function must run separately. Once the "host" is running you can open a window very simply by making a call like:

## OpenVindor(hos tnane, a1, a2, ...a7)

The parameters al-a7 give information on the size, position and appearance of the window. Once the window is open, any of the graphic drawing calls, such as DrawCircle(hostname, $\mathrm{x}, \mathrm{y}$,radius), will be drawn in our host's window.

This brings us back to our parameters "hostname" and "nport". These are the names of two ARexx ports set up by the host. The first port (hostname) receives the graphics commands from your main graphics program.
It is not necessary for you to know that the commands are being sent to the ARexx port of a semi-autonomous little unit, but it can be useful.
For instance, if your graphics program crashes, and you are a left with a hanging window that you do not want, you can get rid of the window and free all its resources with the command:

## "RDDRESS hostnane Exit

## made

which is the same as calling the function Exit(hostname) directly from your main program.

The use of "nport" is more subtle. While you do not need to know anything about "hostname" in order to create graphics, you must know quite a bit about the "nport" before you can receive information about window events like mouse clicks and mouse movements, menu selections and so on. RexxARPLib uses this port as a sort of duplicate port to the host window's own user port, in order to notify you of

```
/* Square.rexx */
ADDRESS coMMND run rx '22'x || "callCreateHost('Host','Unused')"
ADDRESS COMMAND 'WaitForPort Host'
vidth = 440; height =220
flags = 'WINDOVDRAG+VINDOVDEPTH'
Call OpenVindow('Host',20,20,vidth, height,,flags,'The Square Vanishes')
/* the initial square */
pt.1.x=0 ; pt.1.y=1 ; pt.2.x=1 ; pt.2.y=0
pt.3.x=0; pt.3.y=-1; ;t.4.x=-1; pt.4.y=0
scdown =0.9
DO i=1 T0 50
    call SetAPen('Host',i)
    /* Calculate smaller square */
    pt.5.x = pt.1.x ; pt.5.y = pt.1.y
    DO }\textrm{D}=1\mathrm{ T0 4
    next=n+1
    pt.n.x = pt.next.x scdown * (pt.next,x-pt,n,x)
    pt.n.y = pt.next.y scdown * (pt.next.y-pt.n,y)
    PARSE VALUE Convert(pt.n.x, pt.n.y) vith px,n,x px.n.y
    EMD
    /* Draw the square */
    Move('Host',px.1,x,px,1.y)
    AreaDraw('Host',px,2,x,px,2,y)
    AresDrav('Host',px,3,x,px,3,y)
    AreaDrax ''Host',px,4,x,px,4,y)
    AreaDrav('Host',px,1,x,px,1,y)
    AreaEnd('Host')
    END
Call Exit('Host') ; ExIT
/* convert ( }x,y\mathrm{ ) coordinate to pixel */
Convert: PROCEDuRE EXPOSE height vidth
x vidth*(1+arg(1))/2
y = height*(1-arg(2))/2
RETURN x y
```

events that are being recorded at the user port.

The events at the "notify" port will be reported as simple ARexx strings, and are therefore much easier for you to process than system messages from the "real" user message port.

There are certain rules to be followed when obtaining messages from Amiga ports. When a message arrives it must be copied (for future use) and replied to as quickly as possible, in order not to slow down the multitasking system.

The functions to do this are supplied in the "rexxsupport" library, which is part of the ARexx distribution, and should be in your libs: drawer. We cannot go into detail here (we have looked at this subject in the past, but you should read at least some documentation on how this works before trying it. Looking at the examples supplied with RexxARPLib


# easy 

Even experienced ARexx programmers baulk at attempting to mix ARexx with
graphics, but it needn't be too difficult, as Alex Gian explains
(or even copying them outright) will also give you some insight. Here you are bordering very much on the realm of real Amiga system programming.

This demonstrates the creation of a simple graphic using RexxARPLib. It does not report any events happening at the window - it only draws a picture Look at Figure I for the listing

This gives you some idea of the use of this library. In the next issue we will analyse an example that also receives mouse-events, as well as discussing some of the limitations of this system, so be sure to have a copy of RexxARPlib.library (v.3) by then. We will also be looking at some other exciting ARexx products.

Of course, a simple system like this cannot hope to provide the advanced tools of a program like DeluxePaint, but it also has its strong points, especially in repetitive work.

Try doing our simple graphic on DPaint by hand! In fact, how many of you have wondered why DPaint has no ARexx port? As a matter of fact, there is a way to get programs with no ARexx interface to run under ARexx control, but that will have to be our subject another time.

With ARexx and a few suitable libraries, you can experiment easily with the Amiga system without resorting to a compiler.

## Future steps

If you do try experimenting with this ilbrary. and you find it useful but would like something more powerful, then I suggest trying the apigtithrary and rngen.fibrary.
The former does very little to protect you from the system, but is very flexible. The latter does not protect you at all - it's just you and the "guru". Hore power than that you will only find in your assembler or compiler.

There are several books on the Amiga system. You should be aware that most of them Ive their examples in C , so the ability at inast foread C is a strong advantage.
Other than the official RKM manuals, I Yould recommend a book ilie Mapping the Amiga or P Overaa's excellent Mastering Amiga System, but there are several good books out there - check your pubilic library iirst. I would also mention the Amiga C Club's excellent tutorial, available for the price of a tew PD disks.

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Everyone is organised and poised for the first day of shooting - crew and cast have arranged their time around your schedule. There's a buzz of excitement in the air as rehearsals and last minute details are sorted out.
The next step is working through the script with the actors. Rehearsals are essential for both director and performers alike, to lift the words off the page and get them moving in the way they will eventually to be seen on the screen. Many films made in Hollywood don't have rehearsals because hiring the actor for the extra time costs too much and the lack of understanding of a usual dodgy script to begin with glares at you from the screen.
As a result, unless the performers are very experienced and can find the subtext (what's really being said in a scene) from reading cold straight off a script without running through it properly several times, the actual shoot will most likely be delayed through uncertainty, drying up with lines and the performers making decisions with the script that are predictable, unsurprising and at worst, wooden to watch.
Set up the rehearsal area to be as close as possible to the space they will be using during the actual shooting and run through the scene. Working together and going through the script, making decisions concerning what each scene is about and how lines are going to be said, will produce a situation which breeds both confidence and understanding in the actors and director.

## PEFORMANCE

One of the most important rules to remember is never to push for the exact performance you want to see in front of the camera - it may well mean that by the time the scene is played out for real, the players will have reached their peak and lost the spark for a particular scene.

While directing actors is very much a two-way street, at the end of the day it must come down to the film being made and knowing when to say "enough talk, let's do it".

With the cast finely tuned and the crew ready to burst onto the set, the big day arrives where all your hard work and preparation will be put into motion. Always go over the scenes to be shot the night before to prepare yourself for the shoot the following day. Constant reappraisal of your work is healthy for "programming" your subconscious so that answers to un-thought of questions will arise as if by magic on the day.
Set a production meeting for first thing in the morning to lay out what is going to be done during the day and to see if everyone is focused together as a team - and that no problems may have arisen at the last moment.

Head out to the first location and tell everyone the first shot to be taken. Give a brief description of the kind of image you want

## In a word...

Here's a list of the most frequently used phrases and words on the set in chronological order:
"Quiet please!" Designed to be said either quietly or as loudly as needed. Follow this with..

Roll tape"
to the sound recordist/camera operator. They'll press the record button to begin the tape and respond with..
"Speed".
when the tape has had time to speed up fully ( $5-10$ seconds) and to give the editor space to breath in the editing suite. Once done, the director cries...
"Mark it" and the clapper person rushes in and marks the shot with the scene

and the lighting to go with it. Then leave them to it and inform your actors what lines and shots are up next so that they know exactly what is going on to save any confusion later.

It's common mistake to become so involved with the technical side that the actors often end up being treated as a piece of equipment and little else. Treat them with the respect they deserve and the end performance will be better because they'll care about what they're doing.

Throughout the shoot, make sure that your PA (production assistant) keeps in constant contact tallying the times and locations, giving a clear idea of how long you have left

An essential piece of paperwork is the logging sheet where the start and end times of a shot with a short description are marked for each take. This makes post-production far easier in the editing suite, saving time and in some cases, money

Above all, remember never to look indecisive or uncertain - make a decision, good or bad, to get the film made, and stick to it.

# When the big day arrives 


and shot number including which take it is. This is very important for editing purposes to help with syncing and finding the relevant shots off the logging sheets. Once done, the director shouts, cries or weeps..
"Action!" and the shot begins. When done...
"Cut" ..................................brings everything to a halt and everyone relaxes until the director calls...
"Spot check, please"..............and the sound recordist/camera operator looks at the take to check for sound or picture drop out which will turn out either "positive" or "negative"
"Let's go for another take"
decides the director and the process begins all over again.


#### Abstract

...or what to do in the rehearsal room and on the set in the fourth part of Adam Phillips's video making extravaganza


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Modem music has been revolutionised by the computer and sequencer combination, but as ever there's a price to pay for the added convenience. Alas the price all too often remains unnoticed by the novice, resulting in the inevitable transformation of inspired ideas into bland end results.
The problem is caused by the very convenience that's brought about the sequencing explosion. All too often roles are reversed between man and machine as the human element mutates into the automated bit.

As the sequencing carrot of "cut and paste" dangles ever more invitingly before the eyes of the beginner, the creative spirit slowly ebbs away

By default, machines - no matter how complex - always lean towards uniformity. However, this adhesion to rules and formal structure isn't only restricted to computers, it can also happen to humans...
A prime example are the many classically trained musicians, who although technically spectacular in their implementation often lack for a creative flame, extinguished by the musical structure ingrained during the leaming process.

After many years as part of the Transit van set, playing in dives and rehearsing in countless Scout huts, church halls and assorted back bedrooms among a mixture of the classically trained and the self taught, this insistence on structure becomes blindingly obvious during the inevitable end of session jam.
Invariably in the starring role during rehearsed material, the classi-
namely the paperless environment. A decent Biro is just as important as any part of your set-up and during the planning stage it's vital.

Assuming youre now armed with pen and paper it's time to tum on your synth, select your favourite voice and start work on the hook or key melody. Depending on your prowess on the keyboard, this can be as simple or complex as you wish.

Now before an increasingly itchy finger reaches for the Record, write down the key notes or chords and start looking for a link to the next section whether it be a verse, chorus, middle eight, intro, out-tro or anything else that tickles your particular ivories.

It's very important that the various elements flow together prior to recording individual sections. All to often if you simply charge headlong into a piece thereby creating finished individual sections before con-


# A classic cock-up 

cal elements usual sink into the background during the free form of a jam.
The question is: Why should the best musicians in the room pale so badly in such circumstances? The answer is simple: Rigid musical thought always looks for the correct way to progress, rather than the often inspired route chosen by the blissfully ignorant members of the "suck it and see" fratemity.

## PROGRESSION

While emotion and good old guesswork drives the self taught from one chord progression to the next, the classically trained are busy looking for the right notes, rather than the inspired.

The end result is that the classical types are usually happier playing the works of a composer rather than writing their own material. A quick glance at the popular - and not so popular - charts stands as a glowing testament to that.
A similar problem afflicts a lot of computer-generated music as the uniformity and adhesion to a format means the inspired and accidental are often absorbed by the constriction of the "cut and paste".
As a result, the battle against blandness has to be fought every time you tum on the machine. In my humble opinion music is, and always should be, an arform, an area in which the challenge is to convey the emotions of the moment and the inspiration they inspire.
This is where the real battle between man and machine takes place. No matter how clever software becomes, machines will never feel the emotions that make good music great.

It's true that hours and sometimes days can be saved by sequencing but in order to create anything other than lift music you must remain the master and not simply the slave.
OK , after insulting almost everyone who's ever played an instrument - electronic or otherwise - it's time for Austin's patented guide to popular music.

The first job is to throw away any preconceptions that the machine will in some way write the music for you. As a result, before even touching the record button it's wise to have a firm - or at least firmish - idea of how the piece will appear in its final form. At this point yet another technological fantasy can hit the bricks,
templating what will follow, the end results will suffer as compromise slowly creeps in as you attempt to join two basically incompatible elements.

Once all the basics are in place you can finally begin the recording process, although if you're wrestling with the eternal question "is this a classic or just a load of cobblers?" a top tip is to have an early night and return refreshed in the moming.

If in the cold light of day you can't remember a single note, I'm afraid your worst suspicions are probably correct and your wouldbe masterpiece is indeed complete crap!

Assuming that you've remembered every note, the construction process can begin. There are basically two routes available. Firstly, you can select the required instruments and work on the piece section by section to assemble the finished product. To be honest this is probably the fastest way to work, but it doesn't lend itself to accidental inspiration very easily.

## METRONOME

The second option is to build the entire piece using the basic key notes with perhaps a metronome as an additional guide. If at all possible, avoid designing the drum track until the major chords, bass lines and accompaniment are in place.

This isn't because the drums are any less important than the rest of the production - in fact quite the reverse. If there's one element of sequencer generated music that suffers from the "cut and paste" more than any other it's the drum track.

Due to the uniform nature of drums and percussion they're the first to fall foul of blanditis. As a result, if they're left until later in the production the accompanying music isn't forced to pander to an invariably monotonous cut and paste drum special.

Equally important is the fact that adding the drums and percussion later means you're forced to think more along the lines of a real drummer and attempt to tailor the drums to the track rather than the reverse.

Well, alas that's all that space will allow, so I'm afraid I'll have to curtail this particular rant and pass the music insight into the capable hands of Paul Overaa - so feel free to send all hate mail to him. Thank you, and good night.

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\(T\)he typical reaction of a comms head when you say you've just joined Compuserve is one of sucking his cheeks in like a man estimating your double glazing. Thew, that's going to cost you a bit, isn't it?"
This is a classic response, and one which is I think a little bit out of date. There are benefits, huge ones too, to being on Compuserve, but there are some drawbacks.

One is cost, certainly, another is the sheer complexity of the thing, and one is a sort of navigational problem. CompuServe is zood, certainly, but it's hard to use, and not the most up-to-date piece of kit on the airwaves, as Ill explain in a minute.
Cost used to be the only issue as far as I was concemed, and that's actually the first thing that surprised me about the new pricing strategy. One of the previous reasons I never tried to get in account is the fact you need a credit card to subscribe.
1 just got one so that removed that little obstacle. Everyone I should think has been sent one of those little info booklets with a special \(\log\)-in number and agreement number, password and the like. I simply dug out one of those and checked out the details.

CompuServe is essentially an American system, so all the money you spend on-line is in dollars. The Standard Rate is 58.95 ( \(\$ 5.90\) ) a month, and for this you are granted free access to all the basic services, like UK and World news and sport, weather maps and reports, electronic mail, and access to Grolier's Encyclopaedia, computer news, Home Shopping, HealthNet, airline hotel and car hire information, Roger Ebert's Movie Reviews,

change your settings to 8 N 1 again after you've logged on for the first time, but nobody told me that. Secondly, you may have a bit of trouble with up and download protocols. Compuserve have seen fit to run at a top speed of 9,600 baud, and chosen to ignore the protocol used by 80 per cent of the civilised world, ie. ZModem.

This means that you are restricted to Compuserve-B, which I can't get to work at all, and XModem and YModem, both of which work at truly risible transfer rates.

This may be a problem you can solve, but so far I'm not having any luck. At the present moment downloads are slow and difficult, compared to the fast downloads I get at 14,400 .

This may seem like a small problem to users of 2,400 modems, who not only won't notice any difference, but will also

\title{
CompuSpend?
}
on-line games, Classified ads and various other member services. Other than that you have to pay for "extended" or "premium" services. At 9,600 baud the pricing for extended and premium services is \(\$ 16\) ( \(\$ 10.60\) ) per hour. Then on top of that you cop the comms surcharge depending on how you reach CompuServe. I dial up CompuServe direct in Bristol, although there are local nodes all over the place.
Connecting direct to CompuServe costs \(\$ 7.00(\$ 4.60)\) per hour at what they call Prime Time between 8 am and 7 pm , and at weekends or between 7pm-8am weekdays it's free.

There is also an alternative plan for users who aren't going to be around very much, which only charges you \(\$ 2.50(\$ 1.60)\) per month, but you cop a bigger charge for all the services, regardless of if they are basic, extended or premium.

At 9,600 baud this is a whopping \(\$ 22.80(\$ 15.20)\) per hour. To get this in perspective, you are not going to go on CompuServe for hours at a time.

The system is very complicated to use. First you have a problem with baud rates and protocols. I was told by my booklet to set my settings to 7E1 and off we go. It turns out you should

\section*{Read my lips}

The niggles added to the problem of the system being so large, so is the solution an off-line reader? Well the best you can do on the Amiga is a terrible program catted Autopilot, which only works in interlace mode, and due to the way CompuServe works simple has to read through and capture all the messages the same way you would if you were on-line.

It's a dreadful state of affairs, especially when you've been pampered by having a good clean system like CIX to use for the last five years or so. The CIX and Nicola combination ts pertect, and altows you a tot of treedom to use the CIX system as you please. Autopilot is as bewildering as the CompuServe interface itself.
get cheaper on-line time on CompuServe.
It may sound like I'm a bit down on CompuServe - well I'm not. It's a massive Corporation, not a single sysop, so changes are slow in coming. We still have the long tedious ID numbers instead of easy to remember handles, we still have charge upon charge per hour. We also still have no ZModem.
But in spite of all of these criticisms it remains a huge source of information and files, if you can get them. It's a point of contact with hundreds of thousands of people, and companies too. It's like CIX amplified by about 1,000 times.

Is it worth it? Well I haven't got a bill yet, but I'm sure it is. Some people tell me that the Alternative pricing plan is better if you don't intend being on CompuServe all the time, and I'm sure that's true. Unless they get ZModem and 14,400 baud real soon, I think Ill be nipping on only once in a while.

> Comms expert Phil South joins CompuServe, and wonders if he's doing the right thing

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Send blank disk \& S.A.E. for demo version

 you know the right parameters with which to control them. I've evolved these little procs to do all the work
ir me:
The Appear proc is the more complex. Appear is an unpredicable command, and the best effects will only emerge after moh toing and froing and bug testing. The proc goes like this:
```

Rea ** Appear **
Ren
Procedure _APPEAR[SRC,DST,EX]
Ippear SRC To DST,FI
End Proc

```

Iow have to seed it by something like:

\section*{APPERR[0,1,5]}
with SRC being the source screen (in this case 0 ), DST being the destination screen (this one is 1), and finally FX the effect. I find that odd numbers work well, and you'll find this with a lot of imos commands.

You have to input numbers divisible by a certain figure or the effects don't do what they should. I suppose you could call it a feature, but a cynic would call it a bug. Ouch, I know that's a raughty word in Amos circles, but true enough. .
Anyway, Fade is a similar animal. The easy proc goes like this:
```

Ren ** Fade **
Ren
Procedure _FADE[SPEED]
Fade SPEEED
Wait SPEED+15
End Proc

```

The fade happens no matter what else is going on, although if you do another screen op, or the fade is interrupted by some-


See what you can do with a little effort?

\section*{Totally moved}

I got a note from Anne Tucker to say that Amos PD Library and the Totally Amos disk magazine have moved. They've forsaken the hills of Wales for the plains of Essex, and the new address is Amos PD Library, 17 Wick Farm Road, St Lawrence Bay, Southminster CM0 7PF. The Totally Amos mag and Aaron Fothergill's Amos Club Newstetter are the two best sources of Amos into avallable in the UK, and should not be missed.

Issue 13 is out now, and it contains some really kickin' code, like the plasma effect I've been looking for for some time. Easy to do even in Easy Amos! Plus an example of a complete game, a frogger clone (barf) plus a really amazing starburst routine using AMAL, which any still shots just can't do any justice to.

Oh and there's a really odd maze game where you draw a maze and the computer calculates the shortest path through it. Nice algorithm, shame about the game.

Anyway it's all in Totally Amos, not to mention the reviews, graphics, hints and tips etc that you get as well. And all on disk, which is more than you can say for my stuff!

\section*{AMOS}
thing, you won't get a smooth result. Waiting is the best idea, and the formula for the best wait time is whatever the speed is multiplied by 15 .
Fades can be used to good effect to bring up a screen or render it in a single colour, or indeed fade it to black. I find a good effect is to synchronise a sting on the soundtrack (an orchestral hit for example) with the appearance of a picture; just show it on the screen instantly by screen swapping.

Then as the note dies, fade the picture out. Then sting again and put up another picture, and then fade again, or fade to red, then fade to black.
Fading to a colour is a popular demo pastime, and you do it quite simply by adding a colour list to the end of the command:
```

Fade 15,\$100,\$200,\$300···... ets

```
and any number of colours up to the amount allowed in the current screen mode.

\section*{Fade to}

The idea for a title sequence for a Dracula game springs to mind. Titles flash onto the screen with a flash of a white screen, then the titles are there. Fade to black.

The main title, "Dracula Returns", is flashed up in white on the screen, which then fades to red... sinister, and really effective if teamed with the right music.

\({ }_{205}^{20} 8208\) SCORE: 080888 LEVEL: 8888881
Frogger makes a comeback on Totally Amos

 Amos issue 13.

\section*{Write stuff}

If you have an Amos question, then please write to Phil South, Ames Insight Amiga Computing Europa House, Adilington Park, Macclestield SK10 4NP.

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Take a trip to a stationery shop of course and buy some preprinted paper. Recently I had to produce an annual report and needed a bright and professional cover
As I only needed 35 copies, to have them printed in colour was not cost effective so I investigated a range of pre-printed papers that are available from a Belgian company called DECAdry, better known for its press-on lettering products similar to those produced by Letraset.
On the DECAdry poster I was able to choose from as many as 150 different designs. These included graduated papers, an effect many try to reproduce on their home printers unsuccessfully because of the high resolution needed to print the hundreds of different shades. The DECAdry gradients are all linear, from dark to light down the page.
If you are looking to stand out in a crowd there are fluorescent colours, and as well as these general purpose papers there are many specialist designs in pastel colours so that text can be selectively placed on top of the colours.
You can choose from papers with themes like the written word, snowy landscapes, seaside landscapes, ballooning communications, birthdays, children, sports, computing, and lots, lots more.

\section*{COPIER PAPER}

The designs come in more than more one format. The basic one is an A4, single-sided design, on a paper weight of 80 gsm , the same as your average copier paper.
But there are other weights and sizes available, like 165 gsm which is a stiff card, and A3 80 gsm , great for making eyecatching posters, provided your printer can print onto A3 paper of course.
Birthday cards and tri-fold brochures can be created using preprinted materials. The cards from DECAdry come flatened, ready to put through your printer, and pre-scored so that folding them in the correct places is not a problem. There are about \(30-40\) different designs in the cards section and currently 12 tri-fold designs.
Pack sizes vary from 50 to 100 sheets depending on the weight of the material, and prices are very reasonable - 100 sheets of a patterned paper cost me just \(\ddagger\{\) on special.
There are some piffalls you need to be aware of. Because you

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\section*{A little help from my friends}
about your design and the type of elements you want to put on to the page, and whether they are feasible on a pre-printed paper.

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As a friend said when I first tried it: "Cor, Ben, that looks really professional!" I didn't have the guts to admit that I'd cheated.

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Kim - a new educational package, the artist's PenMouse, and a guide to the A1200
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Old software, new prices (2)
 Binw liniow

Educational memory game for four year olds or above Supplier: First Computer Centre Phone: 0532319444 Price: \(£ 19.99\)
im is taken from the children's party game and has been designed to teach memory, reading and word recognition skills through a memory game. Aimed at four-year-olds or above, it teaches by selecting objects and then the player or team is given a set time to choose the objects they have just seen out of a screen-full of 20 pictures.

There are over 200 pictures and words in all to memorise from categories such as Animals. Travel, Clothes and Numbers. There are many objects built in but more can be added using any paint package which produces IFF output.

Users can alter the amount of objects to be memorised from one to ten and the amount of time to memorise them in can also be set from one up to twenty eight seconds. Whether the appropriate names or the pictures alone should be memorised can also be selected.

The player then clicks on the objects they think they have remembered and selects them by using the mouse pointer. They are told whether they are correct or not by right or wrong appearing in the corner of the box.

Scoring counts the number of correct items memorised and deducts marks for incorrect answers or "Monkey Marks"


Memorise the seven different modes of transport


A clear, well set out options screen

Can your child become the next Memory Man with the Amiga's help? Kim, a new educational game, certainly thinks so


Can you remember which flogs you've just seen out of this lot?
(as a Monkey can play by random guesses) and then multiplies by the time display. So the time taken to memorise their choices becomes important.

As the game is aimed at the younger player (around four years and above) the ease of use is one of the most important features. This has been carefully considered for this product, such as the layout of the screens.

The options screen is colourful and well designed, and once a child has had the icons explained they should easily be able to handle the package. There have been some novel ideas added, for instance, the traffic light sequence to signal the start of the game.

Sampled speech has been used to give the player encouragement when they have selected their answers, for example "no, try again!" or "getting there!" and phrases like "that's a good score" will appear on the screen.

The way the scoring has been approached may be a little confusing and a more simplified version may well benefit the game, especially the way the two-player score is displayed which is in the form of a thermometer showing the running percentage marks. The educational value of this game will be
quite high. It is helpful in learning in that it aids memon retention. The child also learns to make associations in order to help memorise the objects. They have to note subtle differences such as in the colour topics.
On a higher level the game should help with vocabulary and spellings. The child is active in learning rather than passively absorbing information and it is continually testing their skills while being fun.
Some of the nouns used are a little strange and may confuse, such as "Swimfins" refers to "Flippers" and "Kayak" being a "Canoe". More "everyday" nouns would be mort beneficial to a younger player as it is not very consistent.
How long the game will amuse them will vary, It does lack variety after a while but the two-player feature will add interest and appeal to children's competitive nature. As will the Honours Board whereby playing a minimum of six rounds, their best six are then counted and, if a high score

\section*{Amiga Next Steps}

Insider guide to the A1200 Author: Peter Fitzpatrick Publisher: Bruce Smith Books Phone: 0923894355

Price: \(£ 14.95\)
The latest in Bruce Smith's range of insider guides takes the A1200 beginner from the basics as outlined in the book's predecessor, Amiga A1200 Insider Gulde, to a point of some expertise in the machine and its operating system.
Twenty-two chapters cover a series of topics including AmigaDOS, printing, the contents of the Workbench disks, and even a bit of game playing. and precious little is left out.
Interspersed among the text are 26 insider guldes, which are single page illustrations of operations such as changing preferences and backing up a hard drive.

Peter Fitzpatrick's style, like many journalists who write books (Peter was editor of an Acorn magazine) can at times be a little broken, but his instructions are given in plain, easy English uncluttered by jargonese, and most beginners should find the book a decent read.

In general, the level of complexity is set just
is achieved, will be put onto the Honours Board which can then be saved onto disk.

The option of being able to customise the game by making your own versions of the Topic Screens can prolong the lastability of the package. This can be done by loading them into a paint program and saving them in 16 -colour IFF mode (however, you can not actually change the words, just the pictures).

Thankfully there is only one disk so the younger, less advanced player does not become confused with a lot of disk accessing. The colourful layout and wide choice of topics to choose from should also retain the interest.

This game should achieve what it sets out to do which is to educate while at the same time be entertaining. Children of all ages and intelligence will benefit from it as some of the topics are more advanced than others. They should enjoy the challenge of testing their memory, especially against friends.


If most mouse reviewers came clean they'd admit that the average test consists of popping out their favourite rodent for ten minutes, followed by a quick twiddle with the review model, then straight back to their old flame to write the

review. Not one to break from tradition, I was fully expecting to follow this tried and tested formula to the letter. But strangely enough here 1 am almost three days later still bang. ing out copy, exiting graphics and testing assorted software

Peter Fitzpatrick

right, even if coverage of so wide an area as "the A1200" means that in places the author is forced to assume his readers are following him.

A very positive note in the book's favour is that it covers many practical tasks and offers hints on how
to accomplish them. Too many tutorial books, especially those with sections on AmigaDOS, concentrate on tricks with script files and commands which most users will never use or need rather than on the practicalities of rescuing data from a floppy or backing up a hard drive.

Not all the advice is good, however, and the blase way in which the author tells us that hard drives can be reformatted if they develop minor errors is a little discomforting.

On a brighter note, there is a sterling section Just prior to this on the rigours of expelling coffee from a drowning keyboard, something in which we at AC have had plenty of practice.

Other parts of the book could have done with a little more information, and you can find the odd slip here and there. For example, Insider Guide No 24 gives advice on changing the boot-up screen mode to enable old games to run, but doesn't mention disabling CPU caches or using one of the many degrader-style PD programs.

This is being a bit picky, though, because few manuals would have bothered with games players in the first place and the book is on the whole a very accurate and concise guide to its subject.

The range of topics covered and the author's attention to his readers' level of knowledge ensures that A1200 Next Steps forms a very useful rung in the ladder from novice to seasoned Amiga user.
with the optical. This is even more amazing considering the long standing relationship between myself and my first love, the Alfa Data Mega Mouse. However I must admit my affections are now directed firmly towards to this rather bizarrelooking implement.

But having said that it must be stressed my enthusiasm is probably due to the artistic benefits which the improved feel of the stylus can supply.

As for more mundane pastimes such as word processing and general day-to-day productivity I must admit a standard mouse is probably a more efficient choice.

It's not that the stylus is bad for that sort of work, it simply isn't as effective for general purpose cut and paste operations.

\section*{ALTERNATING}

The main reason for this is the constant alternation between keys and mouse, which in the case of the stylus means you're constantly forced to down tools and return to the keyboard to type.

This constant need to pick up and drop the stylus is my only complaint. Why not use the top left of the mouse mat which at present is wasted on a rather silly logo - to provide some form of holder for the stylus while you're busy at the keyboard? The answer... No reason whatsoever!

As for accuracy the stylus rates alongside any of its optical counterparts, and of course because there are no moving parts it glides across the mat with consummate ease.

Aside from the aforementioned mouse mat you also receive not two but three micro-switched buttons which wait attentively under your index finger.

In short I'm impressed, and if you're an artist who longs to translate their freehand skills onto the big screen it's the next best thing to a pressure-sensitive graphics tablet. Basically if you've got the cash and the inclination it's worth ever penny. Get one you won't regret it...

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\section*{When mail order companies swipe your money and don't provide you with the product you wanted, what can you do? Adam Phillips reports}
three months of the particular company's last advert appearing or this protection is rendered invalid.

Another major problem for customers are delays. While in the strictest sense companies should not take any money or cash any cheques until the order is fulfilled, it's not illegal so you have to approach the problem in a different way.
One of the first rules of home delivery is if you think you may be out when a parcel may be delivered, remember to give them an alternative address such as a neighbour's or another time to drop by.

If you need your package sent as soon as possible, a useful piece of legal talk is to write to the company's head office if the goods have not appeared to inform them that you need to take delivery by a certain date as "time is of the essence".

Set a reasonable time for delivery such as a week to ten days and if this expires, you become entitled to a refund because the mail order firm is in breach of its contract.

On top of this, you may also be entitled to claim reasonable compensation brought about by the delay, especially if it ended in you buying the product from elsewhere in the meantime.
ail order is at its best reliable, fast, and cheaper than the shops, but at its worst has slow delivery times, low quality equipment and can result in a faulty product posted to your front doorstep.
Like any kind of business transaction, whether it be buying a house or sending off for a piece of software, the first rule is knowing your rights - essential if you want to have the best chance of not being ripped off.

Due to the recession, many small companies have sunk without a trace leaving, in some cases, bitter customers wondering where their money went.

You may think that once a business has folded, it's tough luck and you may as well forget any cash refund. Well not necessarily - if you have paid a deposit or even an advance payment, you automatically become a creditor.

This allows you to be on the receiving end for some kind of pay back but there is always a rub - a strict pecking order with the banks, financial institutes and everyone's friend, the Inland Revenue office, being first in line for any cash hand outs.

Under the Insolvency Act of 1986, you are allowed by law to know exactly what has happened to the deceased business so put your case in writing and contact the liquidators or receivers.
From there, several things can happen. If you have returned the goods for repair and they're still under warranty, it's well worth considering a visit to the premises and having a chat with the administrators or liquidators in person with the intention of laying your hands on your property.

If possible, take along evidence of purchase such as cheque stubs or more ideally, receipts while making sure that you have proof of identity to verify who you say you are.

Alternatively, you may have ordered and paid for the product and it's sitting in the offices with your name and address on it. If so, there's a good case for claiming it.

If you paid by credit card for a price over \(f 100\), then it's possible to claim a refund from the credit card company under the Consumer Credit Act. Though this is not a popular option in the eyes of credit card companies, it's well within your legal rights. If you placed the order through a magazine or newspaper and it displays the either the Perodical Publisher's Association symbol or the Mail Order Protection Scheme, then you are covered for a claim. Make sure that you do this within

The final and most frustrating problem is when the parcel arrives at your house and on opening it you realise that the wretched thing is faulty. If the goods were damaged in transit then it's not the supplier's responsibility and therefore the matter must be taken up with the carrier or Post Office (pop in to your local PO and get a claim form if this should happen).

If, on the other hand, the goods are defective, you have the same right under the Sale of Goods Act as if you'd bought the item directly over the counter. Contact the supplier as soon as possible and by law, you are entitled to a full refund.

Phone and put your complaint in writing and send it by recorded delivery so that they cannot deny anything at a later stage, and arrange for the return of the goods. Also make sure to ask for the return carriage charges to be reimbursed as well. Happy shopping!

\section*{CONTACTS}

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2. Read the advertisement closely. Look for the small print so if anything does go wrong, you're fully aware of what the advert stateddelivery times, guarentees etc. The publication you are ordering from is covered by the British Code of Advertising. The BCAP states that ads should give a delivery time and that it should be no more than 28 days.
3. Look out for extra costs - postage and packaging can sometimes add a few pounds onto the overall price. Some companies
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4. Check availability with a simple phone call. Sometimes the item you want may be out of stock so there may be a delay. Note down what they say.
5. Enquire about rules and costs before you place the order.
6. Look out for the MOPS or PPA symbols and use a credit card for extra protection if paying in advance.
7. When you write off for the goods, remember to include your name, telephone number and address and make sure it's legible. Your number is important for any subsequent
delivery problems that may occur.
8. If you wish to avoid mailshots landing on your doormat every month, tell the company that you don't want them to pass on your name or address to any third parties.

For extra security against junk mail, write to the Mailing Preference Service. Any company wishing to send direct mail should check the MPS register and exclude the people who have placed themselves on it.
9. Keep copies of the order with the date on it as well as any subsequent correspondence that may occur with the company. Make photocopies - computer files on disk are frowned upon by modern courts.
10. Make notes of any phone conversations
you have with the mail order firm and the names of the people you speak to - this kind of information can be very useful as a legal weapon for evidence.
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> Old software never dies - it just gets cheaper, as we find out in our look back at some of the best low cost software around

\section*{PageStream 2.2}

Not much more than a year since its release, PageStream 2.2 is still one of the Amiga's best professional DTP packages and one which is due for an imminent upgrade in the shape of PageStream 3.0. With the new version, Soft Logik promise features to rival Quark Xpress, but v2.2 is still a powerful piece of kit and can now be picked up for a song.

PageStream has always benefited from Soft Logik's strict adherence to Amiga style guides and is thus one of the easiest packages to start using. All the usual key combinations work as one would expect and all requesters are immediately familiar, ensuring a smooth and easy learning curve.

Features of the package include the ability to use any type of font, high quality PostScript output, and advanced page design tools such as rotate box, EPS import, and master pages. The program is capable of handling anything from a simple flyer to a complete magazine layout and is matched only by the latest versions of ProPage for flexibility.

Hunting around and studying the small ads can net you a copy of PageStream for well under \(£ 100\), and it can often be found at computer shows selling for only \(£ 60\) or so, a price at which it is the DTP bargain of the decade, particularly as it works perfectly on AGA Amigas even though it doesn't have a 256 -colour screen mode.
Score: \(90 \%\)
AGA: OK
Average price: £ 60 to \(\mathrm{£100}\)

\section*{Pen Pal}

Still officially supplied by Gordon Harwood Computers (0773 836781) complete with technical support, Pen Pal has been superseded by Final Copy II and can therefore be found in mail order ads for as little as \(£ 29\).

At this price, one of the Amiga's friendliest word processors is a real snip, and should appeal to anyone with an
unaccelerated Amiga. Pen Pal is easy on system resources and can handle graphics faster than most other wysiwyg packages.

There are several structured drawing tools built in to the program to aid in page design, making Pen Pal a good basic DTP program as well as a word processor.

As a bonus, the package has its own simple database program which can be used to generate mail merge lists or for a variety of tasks including keeping track of books, tapes, or CDs. Pen Pal has no AGA support but will work happily on the new Amigas so long as the user doesn't mind a 16 -colour display.


\section*{Gold Disk Office}

Comprising a simple word processor, database, PageSetter 2, spreadsheet, and graph plotting program, Gold Disk Office is an all-encompassing bundle of productivity. The component parts of the package are in themselves a little short on advanced features, but as a whole, Office is great value for money.

Now circulating for around \(£ 45\), Office has no competition other than Platinum Works, which it beats in the

\section*{Scala 500HVT}

The smaller brother to a multimedia giant, Scala HVT (home video titler) is a superb package for amateur video fans looking for a titler that will do a little more than offer the usual horizontal or vertical crawl titles. What's more, since its release at \(£ 100\) it has gradually become more affordable and can now be snapped up


modernity stakes, and could be the answer to many tight budgets.

You won't be competing with Final Writer or Superbase Personal 2, but for the vast majority of home office tasks you will never need another package.

The two most impressive elements are Page, which is basically a version of PageSetter 2, and Calc, a cut down version of the ProCalc spreadsheet.

Both are advanced in their own right and could stand on their own two feet as budget releases, so their inclusion in this package is a boon.

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\(\leftrightarrow\)or most people computing invariably starts with a portable television. Although fine for games there comes a point when a portable simply doesn't do the machine or the user justice.
Literally any productivity package is taken into the next dimension of usability with the addition of a monitor. Word processing for example becomes a pleasure rather than a blurred squinting excise in sado-masochism.

In short, a decent monitor is worth every penny and when it comes to monitors they don't come much better than the new Commodore 1942. This particular unit is ideal for owners equipped with eicher an A1200 or A4000 - as both machines are only at their best in the hi-res screen modes offered by the ECS and AGA.

Better still the 1942 doesn't suffer the compatibility problems which have haunted various computer/monitor combinations. Thanks to its bisync design the majority of the AGA resolutions are available but perhaps more importantly you can use 15.5 kHz for standard PAL - allowing games and lo-res screens to operate perfectly.

Although the financial appeal of a med-res monitor may tempt you to plump for the likes of a Philips CM8833 or Commodore 1084S, don't even consider it! There's literally no comparison between a med-res and an interlaced/productivity display - especially if you're interested in more than just games.

However if games are your primary concern my personal choice would definitely be the Commodore 1084S. At around \(f 199\) it's easily the best value - and in my opinion the best medres monitor regardless of cost.

\section*{Floppies}

Ok, I did get a little carried away introducing the monitor bit. In my unbridled excitement I forgot the absolute misery that running a single floppy system can induce.

Alchough often overlooked in the rush to invest in a hard disk or monitor an extra floppy comes second only to the mouse in the hierarchy of important pluggy-in things.

In my opinion there are two best buys, these being the RocTec and the Zappo - with the latter being the second choice courtesy of its slightly inferior design.
Unlike most drives there are very few frills and no unnecessary gadgetry, just basic dependable hardware that does the job - with the minimum of fuss and expense.

Although both units are pretty basic each has a disable switch along with the option to daisy-chain additional units. If you can live without funky LEDs, flashing lights and anti-virus, either drive is a great investment.

\section*{Mice}

Although the Commodore mouse has come on leaps and bounds of late - thanks to the A600, 1200 and 4000 - there's still room for improvement, especially if you plan to use your


> If you've just recovered from investing in a new machine it's time to talk add-ons. So now Hard Times brings you the definitive guide to the system-building basics

machine primarily in an artistic vein.
If you fit this particular bill my personal choice would be the Mega Mouse from Gasteiner. As well as being arguably the best mouse on the market it still manages to retail as one of the cheapest.

And if quality is what you're after Gasteiner have just launched a new 400 dpi version for just \(f 14.95\) which makes the average \(£ 70\) optical look very sad indeed.
It's true that its mechanical rather than optical design means the occasional cleaning of ball and rollers is essential, but that's a small price to pay considering the excellent price and overall quality.
Aside from the accuracy one of the most appealing aspects of the Mega is it's excellent ergonomic design which fits snugly into the palm while the perfectly weighted buttons wait attentively with micro-switches at the ready.

\section*{Printers}

With the vast array of printers on the market and the varied requirements of the average punter, simply singling out a particular printer as the best buy across the board would be at best a rather hit and miss exercise. However there are a few basic pointers which could come in handy.

For those with an occasional need for hard copy a dot matrix is the ideal choice. However, if at all possible try to avoid the temptation of taking in the cheapest route possible - namely a 9 -pin.

Although 9-pin printers have come a long way it must be said that with the relative price difference being so small a 24 -pin is a much more attractive proposition.

For you extra investment you'll receive much higher quality
output especially on graphic files, and with many 24 pins offering colour upgrade kits the difference between the two formats can really pay-off later on - if and when you decide to upgrade to colour.

The benefits don't stop with simple graphics, in fact all aspects of Amiga productivity benefit hugely from the extra clarity available from 24 pins. If you do intend to invest in the aforementioned 1942 Bisync you'll soon become accustomed to high quality display and expect it from your hard-copy as well as your screen display.

\section*{Modems}

If you fancy branching out from the confines of the back bedroom a modem may well be on the shopping list. If so, here's a few points that the novice might well bare in mind prior to investing.

Like most computer related investments it's not wise to skimp from the off-set. Although it's tempting to save some cash initially you'll end up paying for this apparent saving tenfold later-on as ridiculously expensive phones bills pouring through the letter box

Although there are hundreds of modems on the market it's wise to stick to units which offer baud rates at or above 2,400 . Even at this speed you could be throwing cash away in the long term as the usual standard tends to be 9,600 rather than the slightly outdated 2,400 .

My advice is: If you can easily afford a 2,400 modem save your money and invest in a 9,600 . If you can only just manage a 2,400 l'd think long and hard about comms as a potential pastime believe me it ain't as interesting as the popular press would have us all believe...

However if the urge to get on-line is just too strong to resist Supra offer a great range of modems which for a little extra cash can double up as a modem if the need arises.

Commodore 1942 Bisync Price: \(£ 399\)
Supplier: Silica Systems Tel: 081-309 1111

\section*{Mega Mouse Price: \(£ 10.95\) without mat and holder Price: \(£ 14.95400\) dpi version as above Supplier: Gasteiner Tel: 081-365 1151}

\author{
Roclite drive
} Price: \(£ 59.95\)
Supplier: Gordon
Tel: 0773836781

\section*{Zappo drive Price: £51.50 Indi Direct \\ Tel: 0543419999}

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\section*{3.5" Syquest SCSI External..ع599} 3.5" 105MB Cartridge
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A600 Memory
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PC1208 68882 20MHz.......109.95
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\section*{x-backuppro}

Extremely powerful disk back-up utility, uses the latest custom chip design. Hardware designed by Power Computing.

\section*{X-Backup Pro}
\(\mathbf{\Sigma 2 9 . 9 5}\)
A600/A1200 Colour Scanner available soom

epson \(G T-6500\)
A high resolution 24 -bit colour flatbed scanner from Epson. Scan up to A4 in size on this 600DPI scanner. Comes with PowerScan or ASDG (ASDG is an extra \(£ 99\) ). GT-8000 scans up to 800 DPI .


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\section*{Bare}

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